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ESJ Social Sciences

Attitudes Toward COVID-19 Lockdown As A Risk Predictor In Panama

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Abstract

This document describes an investigation undertaken to examine attitudes towards lockdowns through COVID-19 as a psychosocial risk predictor in Panama. We conducted the study through a cross-sectional, prospective, and correlational approach. The study was constructed containing psychometric characteristics in the form of 36 Likert scale items to collect data. The instrument was sent to 233 participants via Google form between April 17 and April 30, 2020. The participants responded fully to the questionnaire. We analyzed the data by mean comparisons, correlation, and regression. There is a significant correlation between each of the studied factors and attitudes. The results indicate that women and people over the age of 51 have a positive attitude towards lockdown. Finally, from the predictive risk model in which 99.9% of the data fit., the affective factor represents 68%, the cognitive factor 22%, and the behavioral factor 10% of predictive importance for lockdown attitudes to COVID-19.

Keywords: Attitudes, Lockdown, Quarantine, Isolation, COVID-19, Risk, Predictor

Introduction

There are lessons we can take from history. Several articles have been published documenting the COVID-19 pandemic. Most of them focus on the clinical and epidemiological aspects of the pandemic. Some others address the ravaging effects on the human psyche. The former means that even though science has provided the route to understanding via scientific achievements, the virus, and its symptoms, life remains chaotic for billions from a political, cultural, economic, and psychological perspective.

Thus, social psychology gains relevance to help public understanding of social challenges they face by coexisting with a new, highly contagious virus.

Ajzen and Fishbein (1980) developed a theory of attitudes containing three elements: cognitive, other affective, and behavioral. They stated that behavior is determined by reasoning or knowledge, effectively evaluating a particular situation as positive or negative. The decision is made to act or not, permits predicting behavior (Barón & Byrne, 2005).

The knowledge that someone believes they are justified as appropriate or sufficient will permit them to opt for or against measures, in this case, quarantine by COVID-19. Their behavior will be guided by such knowledge and evaluation.

Risk factors are those that can generate inappropriate responses in terms of physical, psychological, and social health. The level of risk is determined by the frequency, duration, and intensity of the stimuli (Unda, Uribe, Jurado, García, Tovalín & Juárez, 2016).

In the case of COVID-19 lockdown, it is enough to review Zimbardo's 1971 Stanford prison experiment (Zimbardo, 1982), to understand the profound implication of risk in which millions of people live in the world that could cause aggression, addictions, and depression among others.

Another essential risk is that of living space. Calhoun's et al. (Myers, 2009) visualized social pathology caused by population density. Calhoun's rodent habitat experiment showed the extent of lockdown required to make the experimental subjects' behavior aberrant. The study provided an understanding of the problems caused by lockdown in social relationships and how it impacts those who react by resisting, enduring, coping, or tolerating an extended period of close physical proximity to others.

His work also allowed Hall et al. (Barón & Byrne, 2005) to lay the foundations of proxemics with its spatiotemporal dimensions that influence, among other aspects, social restrictions, territoriality, and above all, the

physical space necessary for a person to feel comfortable when relating to others.

From January to June 2020, there are 8416 documents related to COVID-19 indexed in Scopus and around 70000 in Google Scholar. From those, only 216 (Scopus®) and 2060 (Google Scholar®) correspond to the field of social psychology. Therefore, the scientific literature in this discipline is exceptionally scarce.

Furthermore, the fear of the unknown caused by COVID-19 has generated stigma and discriminatory behaviors towards those affected. This further contributes to a situation that already undermines social cohesion in such a way that some people might prefer to hide their illness or delay seeking medical care (Shreyaswi & Shashwath, 2020). For instance, in India, stigma is prevalent against people who have contracted the virus, healthcare professionals, and, in general, front-line workers (Chatterjee, Bhattacharyya, Bhattacharyya, Gupta, Das, & Banerjee, 2020). The pandemic has also exacerbated psychological disorders such as anxiety, anguish, and fear in the population, further generating maladaptive responses such as stigma violence. (Matus & cols., 2020).

According to Shreyaswi and Shashwath (2020), the longer the lockdown, the worse the mental health reported. Specifically, symptoms such as post-traumatic stress, avoidance behaviors, and anger have been recorded. The authors mention that variables generating anxiety include boredom, frustration, financial insecurity, and the feeling of isolation. The media further exacerbate anxiety through sensational headlines and a feeling of bombardment. Shreyaswi and Shashwath (2020) propose establishing a defined strategy to integrate mental health services into the public health response to COVID-19 to mitigate the long-term effects.

Kundapur, Rashmi, Sachin, Falia, Remiza & Bharadwaj (2020) analyzed disease trends based on available data from various sources, including the WHO, international organizations', governments, and websites. For instance, in India, data was taken from the Ministry of Health, Family, and Welfare websites of individual states since January 2020. The authors propose reconsidering strategies to contain the disease's spread since it is not yet fully understood. Furthermore, they note it is perplexing that there are no differences in approach by demographics. They concluded that it is crucial to have a centralized system collecting information in a standardized way.

Liotta, Marazzi, Orlando & Palombi (2020) published a study on social connection as a risk factor for the spread of COVID-19 among older adults in Italy. They report that 33% of the total Italian population lives alone, and 53.1% cohabit with two people per household. The remaining population averages between 3 and 5 people per household. According to Liotta et al. (2020), more than 50% of the population aged 85+ live alone, and in some

regions of northern Italy, the percentage reaches 75%. This scenario has reduced the risk of virus spread. The results reveal no relationship between social connection and the spread of the virus in older adults.

Meanwhile, in the United States of America, McFadden, Malik, Aguolu, Willebrand, and Omer (2020) reported a study to understand risk perceptions about the COVID-19 outbreak in the adult population. Of 718 participants, 69% trusted information from scientists. However, the perception of risk was low (5 out of 10).

In Brazil, to profile the population through the expanded model of health beliefs, Fernandes (2020) applied an instrument with 24 items on the perception of risk by COVID-19. The questionnaire included a section related to behaviors and attitudes regarding the motivation to improve health. The sample size was 277 adults.

Fernandes (2020) incorporates psychometric values that prove reliability and validity. The results indicate significant differences in perceived susceptibility and severity dimensions. This approach allows to identify individual beliefs' profiles quickly, directly, and quantitatively for each dimension, enabling effective communication processes and public health education (Fernandes, 2020).

In Paraguay, Rios-González (2020) reported on a cross-sectional study conducted through an online survey on adults, including some university students. The sample was made up of 3,141 people from the country's provinces, including Asunción and its metropolitan area. The results show that 88.35% have not visited any crowded places. 74.31% reported having worn a mask when they needed to go out. The global knowledge of essential aspects related to COVID-19 and protection measures was 62%, which is considered low. The result is striking since most of them are university students expected to have greater intelligence and general knowledge. Finally, Rios-González recognizes the necessity of implementing mass education campaigns to increase understanding of COVID-19.

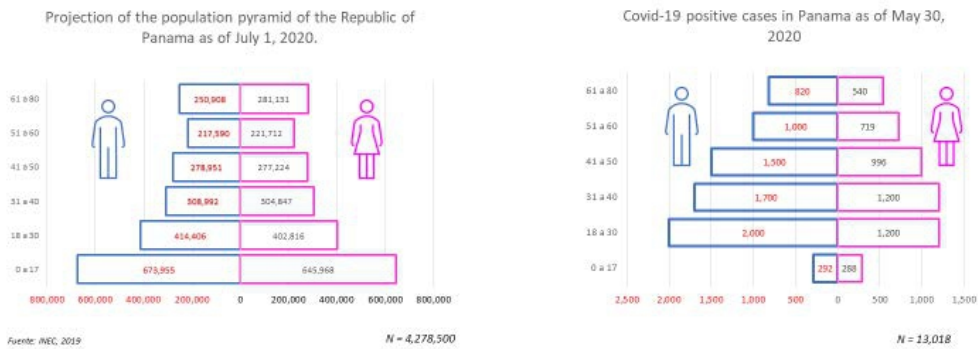
In Mexico, Contreras-Ibáñez (2020) reports high-stress levels among the population, according to the COVIDiStress Global Survey's global parameters. Contreras-Ibáñez (2020) coordinated the application with a sample of 6,424 cases. Among the main results, it stands out that women experience more physical or emotional tension than men. Simultaneously, they face a double journey, and the pressure they feel when trying to carry them out in pandemic conditions leads to additional difficulty. At the same time, it was observed that they face additional responsibilities due to the pandemic.

As of May 30, 2020, in Panama, the number of infected males far exceeds females (7,668 men, representing 59% of the infected population). The total number of positive cases registered in the country to date is 13,018

and 330 deaths (2.53%), according to data provided by the Ministry of Health and the Gorgas Institute (MINSA-GORGAS, 2020).

The most affected group are males between 18 to 30 years old (2,292 cases of infection who represent 18.69% of the overall infections). This is also the group with the highest risk as it will be discussed later. Next in order of most to least affected are: 31 to 40 years old, or 1,700 (13.86%) cases, from 41 to 50 years representing 1500 (12.23%) cases, those from 51 to 60 years 1,000 cases (8.16%) and individuals from 61 to 80 years 820 (6.69%) cases. Panama's projected population breakdown as of July 2020 can be seen in graph 1 (INEC, 2019).

Graph No.1. Comparison of the projection of the population pyramid and positive cases for Covid-19 in Panama



Likewise, women's cases were given the same risk assessment as a function of age. The age group of 18 to 30 leads the list with 1,488 (12.14%) positive cases. The age group of 31 to 40 years has 1,200 (9.79%), from 41 to 50 years, 966 (8.12%); from 51 to 60 years 719 (5.86%); and 61 to 80 with 547 (4.46%) cases.

Method

A cross-sectional, correlational, and predictive study was carried out in Panama to evaluate the attitudes to predict the risk variables before lockdown by COVID-19.

The instrument had two sections. The first section evaluated sociodemographic data; the other, with 36 items on the Likert type scale, measured lockdown attitudes.

The psychometric characteristics had a Cronbach's alpha reliability $\alpha = .921$ and average variance of 53.85% for three factors (cognitive, affective, and behavioral). The total participants were 233 Panamanian adults of both sexes. The measurements were made between April 17 and April 30, 2020 (Matus & Matus, 2020).

The Likert-type scale's 36 items were grouped into three factors (cognitive, affective, and behavioral). Likewise, the full scale was arranged to know the participants' average Attitude, where one is "strongly disagree," and five represents "strongly agree."

The scale has 36 items grouped into three factors: cognitive, affective, and behavioral. Each item can have values from 1 to 5 that correspond to the Likert "type" scale. There may be cases where one or more questions are not answered. To interpret the results, the scores were added and the risk index located

The 12 items that make up the cognitive factor are number 1, 2, 3, 5, 6, 7, 16, 17, 18, 19, 20, 54. As for a scale, low scores range from 0 – 20 (RISK), average scores range from 21 – 40 (NORMAL), and the high scores range from 41 – 60 (HEALTHY).

In the case of the affective factor, the items are: 22, 25, 26, 29, 30, 31, 32, 35, 36, 37, 39, 40, 41, 42, 43. The low scores range from 0 – 25 and are regarded as HEALTHY. Average scores are from 36 – 50 (NORMAL), and high scores range from 51 - 75 (RISK).

The nine questions that make up the behavioral factor are 4, 9, 13, 45, 46, 48, 49, 50, 51 with low scores ranging from 0 – 15 and regarded as RISK; average scores range from 16 – 30 (NORMAL), and the high scores range between 31 - 45 which is considered to be HEALTHY

The instrument recorded sex, age, schooling, occupation, employment status, number of inhabitants in the home (including the person who answered the instrument), number of rooms (considering that 1 living room, 1 dining room, 1 kitchen, 1 bathroom, and 2 bedrooms) and the attitude towards lockdown (variables for risk) from every participant.

The average age of the 78 men was 39 years and 38 in the 155 female participants. The sample consisted of 78 (33.5%) men and 155 (66.5%) women. 35% of the participants reported postgraduate education, 54% the university level, 8% have technical studies, and 3% with high school education (Matus & Matus, 2020).

Snowball sampling was employed (e.g., emails, WhatsApp, social networks), spreading the instrument by email and WhatsApp.

An ex post facto, cross-sectional, causal correlational non-experimental design with a regression hypothesis ($y = m \cdot x + b$) was used to predict risk variables for COVID-19. The Appendix of this document presents some statistical analysis of the attitude as a function of different factors.

Finally, it is worth mentioning that the study's limitations are the social desirability bias of the participants and difficulties in accessing the internet. Furthermore, the present study cannot be replicated due to the specific conditions in which the data was collected—everything was measured during

COVID-19 lockdown. The lockdown measures are now more flexible, and there is knowledge *a priori* that prevents us from repeating the study.

Results

In 16 of the 35 items, the Student's T-test revealed significant differences for independent samples. Table 1 shows the results.

Table 1. Differences based on sex

	Sex				t	gl	P
	Male n = 78		Female n = 155				
	\bar{x}	σ	\bar{x}	σ			
11. Work from home	3.78	1.43	3.37	1.45	2.04	231.00	.04*
36. I study what I like	3.94	1.7	3.47	1.25	2.95	176.82	.00**
33. I exercise	3.33	1.33	2.96	1.34	2.01	231.00	.05*
25. I feel like a prisoner	1.90	1.11	2.38	1.26	-2.99	172.66	.00**
20. I feel isolated	2.05	1.17	2.58	1.38	-3.06	178.59	.00**
24. I feel worried	2.72	1.23	3.09	1.35	-2.05	231.00	.04*
15. I feel helpless	1.86	1.08	2.44	1.31	-3.60	183.34	.00**
14. I feel vulnerable	2.08	1.15	2.74	1.35	-3.92	178.52	.00**
18. I feel scared	2.24	1.19	2.70	1.28	-2.62	231.00	.01**
21. I feel angry	1.83	1.04	2.25	1.20	-2.58	231.00	.01**
19. I feel annoyed	1.78	1.04	2.34	1.34	-3.47	191.74	.00**
17. I feel in danger	2.15	1.22	2.63	1.32	-2.64	231.00	.01**
13. I feel confused	1.91	1.10	2.54	1.35	-3.79	186.04	.00**
22. I feel uncertain	2.50	1.33	3.01	1.31	-2.80	231.00	.01**
34. I talk with my friends.	3.86	1.09	3.51	1.17	2.20	231.00	.03*
29. I dance	2.47	1.48	2.92	1.38	-2.28	231.00	.02*

* $p \leq .05$. ** $p \leq .01$

The results indicate that women are at risk psychosocial, considering that the averages obtained are significantly lower than men in questions 11, 36, 33, and 34. The situation is more delicate for males than females since they have low scores on items 13, 14, 15, 17, 18, 19, 20, 21, 22, 24, 25, and 29. Table 2 shows the differences by age group. The grouping criterion is related to the information on the highest epidemiological incidence of Covid-19 infection in Panama. The items that do not appear, such as 13 and 18, are due to no statistically significant differences.

Table 2. Differences by age group

	Age group				t	gl	p
	18-50 n = 186		51 – 80 n = 46				
	\bar{x}	σ	\bar{x}	σ			
10. I eat the necessary	3.78	1.13	4.15	1.01	-2.01	230.00	.05*
08. I watch tv news	3.21	1.25	3.93	1.00	-4.18	83.61	.00**
11. I work from home	3.38	1.48	4.04	1.21	-3.17	81.79	.00**

36. I study what I like	3.53	1.22	3.98	1.11	-2.26	230.00	.02*
02. I wash my hands	4.23	1.00	4.63	0.68	-3.26	99.21	.00**
01. I inform myself about COVID-19	3.88	1.05	4.37	0.80	-2.95	230.00	.00**
05. I talk with my family about COVID-19	3.72	1.14	4.17	1.16	-2.40	230.00	.02*
33. I exercise	2.97	1.33	3.52	1.33	-2.51	230.00	.01**
03. I know how COVID-19 transmits.	4.14	0.94	4.48	0.75	-2.26	230.00	.02*
04. I know what to do in case that I am a COVID-19 patient.	3.99	1.02	4.35	0.79	-2.19	230.00	.03*
12. I forward truthful information	3.63	1.24	4.24	0.87	-3.87	95.03	.00**
06. I can identify COVID Identify the symptoms de Covid-19	3.82	1.09	4.28	0.91	-2.64	230.00	.01**
09. I know the Ministry of Health Decrees	3.68	1.12	4.15	0.97	-2.89	77.64	.00**
17. I feel in danger	2.39	1.27	2.83	1.42	-2.06	230.00	.04*
31. I do manual activities	2.67	1.44	3.26	1.32	-2.54	230.00	.01**
32. I read	3.32	1.38	3.96	1.17	-3.19	78.63	.00**
30. I write	2.73	1.48	3.37	1.39	-2.76	72.42	.01**
35. I watch TV	3.03	1.37	3.80	0.96	-4.46	97.85	.00**

* $p \leq 05$. ** $p \leq 01$

Those over 50 years of age obtained higher averages in the 18 questions that had statistically significant differences. Tables 3 and 4 show the statistically significant differences by sex, age group, and factors.

Table 3. Differences by sex and factor

	Sex				t	gl	p
	Male n = 78		Female n = 155				
	\bar{x}	σ	\bar{x}	σ			
Affective Factor	2.18	0.86	2.64	0.90	-3.76	160.23	.00**

** $p \leq 01$

Although the averages for both sexes are low, men are more emotionally vulnerable than women.

Table 4. Differences by age group and factor

	Age				t	gl	p
	18-50 n = 186		51 - 80 n = 46				
	\bar{x}	σ	\bar{x}	σ			
Cognitive factor	3.80	0.85	4.27	0.61	-4.27	92.03	.00**
Behavioral factor	2.72	0.85	3.07	0.78	-2.49	230.00	.01**

** $p \leq 01$

Participants in the age group between 51 and 80 show higher cognitive and behavioral values. The following table shows the scores of general attitudes concerning age groups. Table 6 indicates the values of the correlation analysis.

Table 5. Attitudes and differences by age group

	Age group				t	gl	p
	18-50 n = 186		51 - 80 n = 46				
	\bar{x}	σ	\bar{x}	σ			
Attitudes	2.90	0.61	3.16	0.55	-2.59	230.00	.01**

****p ≤ 01**

Table 6. Pearson's r correlation

		Cognitive Factor	Affective Factor	Behavioral Factor	Attitude
Cognitive Factor	Pearson Correlation.	1	.225**	.634**	.789**
	Sig. (bilateral)		0.001	0.000	0.000
	N		233	233	233
Affective Factor	Pearson Correlation.		1	0.040	.731**
	Sig. (bilateral)			0.547	0.000
	N			233	233
Behavioral Factor	Pearson Correlation.			1	.615**
	Sig. (bilateral)				0.000
	N				233
Attitude	Pearson Correlation.				1
	Sig. (bilateral)				
	N				
** Correlation is significant at the 0.01 level (bilateral).					

There is a strong and direct statistically significant relationship between the three factors and attitudes. The result is summarized in tables 7 and 8.

For the predictive model, the data was subjected to linear regression analysis. The predictive risk model has a 99.9% data fit with a significance of 0.001, as shown in Graph No.2. The correlation for the other factors and attitudes is presented in the Appendix.

Table 7. Linear regression analysis

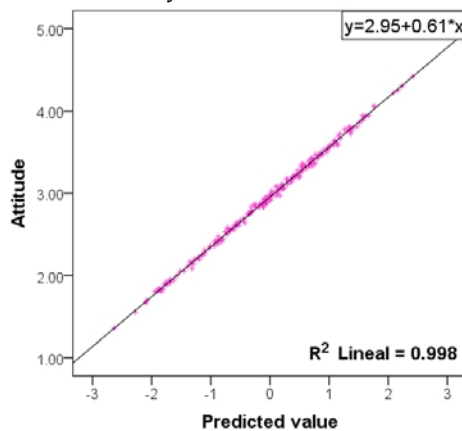
Effect	Sum of squares	gl	Quadratic Average	F	p	Relevance
Corrected Attitude model	85.14	4	14.19	10,852.38	0.000	

Transformed factor.	Affective	29.56	1	29.56	22,603.62	0.000	0.68
Cognitive transformed.	factor	9.43	1	9.43	7,213.43	0.000	0.22
Behavioral transformed.	factor	4.44	1	4.44	3,394.79	0.000	0.10
Remainder		0.30	228	0.00			
Corrected total		85.44	232				

Table 8. Risk prediction model

Model	F	R2	^R2	B	Standard Error	β	p
Model 1 Affective	34560.006 (3-229)	0.998	0.998	0.411	0.002	0.615	.001

Graph No.2. The observed prognosis for Attitude corresponding to the linear risk model $y = 2.95 + 0.61x$.



Discussion

Businessman ranging 18 and 30 years old, have considerable psychosocial risk factors due to lockdown. These findings agree with those reported by Kundapur et al. (2020) regarding young people belonging to the most vulnerable group in many countries. This discovery is particularly worrying since not only is the rate of transmission and death from the virus higher in men, but they are also more exposed to psychosocial risk factors. In other words, it implies that susceptibility appears both in the biological, as well as the psychological and social spheres.

Females showed a better result in the affective factor, which contrasts with the results reported by Contreras-Ibáñez (2020), who points out that women experience more emotional tension and feel additional pressure when

trying to face their double burden in a pandemic situation. Thus, affective management differs among the female population depending on the geographic region.

The differences between men and women coincide with those reported by Bischof, Oertelt-Prigione, Morgan, and Klein (2020). These authors mention that it is essential to differentiate between women and men due to their vulnerability, especially men, who are exposed due to their behavior. Social norms and other socially relevant variables change with culture. Likewise, Buzzi, Tucci, Ciprandi, Brambilla, Caimmi, Ciprandi, and Marseglia (2020) found that male adolescents have a worse attitude towards lockdown than women. The authors justify this situation because men are socially related outdoors, unlike women.

Regarding the differences by age, this study partially coincides with that reported by Liotta, Marazzi, Orlando, and Palombi (2020), regarding the spread of the virus among older adults in Italy, by household size and population structure. The age group under 51 years of age has a higher risk of contagion. This result coincides with those reported by Joo and Kang (2020), who mention that young generations have the highest percentage of confirmed cases.

Czeisler et al. (2020) state a significant association between the feeling of security against COVID-19 and the age of young adults, implying they do not perceive a risk of infection or severe disease compared to those over 65 years old. It is also worrisome that, if coexistence is carried out in violation of the inhabitants' living space, it becomes counterproductive, potentially triggering erratic and violent behavior, as demonstrated by Calhoun (1962) and Hall (1966).

Finally, the lack of knowledge about COVID-19 that was evidenced by the sample of business people is striking, since they urge or pressure the national authorities to suspend lockdown for the economy's reactivation, even against the preventive measures that the Ministry of Health has given daily.

Conclusions

Regardless of the COVID-19's well-known lethality, those individuals sampled neglect social distancing, and stay-at-home measures. This situation is causing a geometric progression of positive cases.

People are facing a series of unprecedented changes. Until recently, it had been possible to contain viruses in some regions of the world. However, the population cannot comply with the recommendations from the epidemiologists, which requires further investigation. Professionals in social psychology have assumed the responsibility of identifying risk by measuring attitudes from the theory of Fishbein and Ajzen to predict behavior.

Women have a better attitude towards lockdown, which represents a protection factor. As for age, there is a stark contrast between those over 51 years old compared to young adults (18 to 50 years old). The latter being those who are at risk and, according to national data, it is also the population containing more positive cases of COVID-19.

In terms of the number of rooms, the average is 7. Thus, the average house has at least one living room, one dining room, one kitchen, one bathroom, and three bedrooms, which, related to the average number of people (up to six) that coexist, seems to be limit for a healthy coexistence. Those at most psychosocial risk of not knowing what to do during the quarantine are young people between 18 and 30 who have elementary education. Regarding the affective factor, men between 18 and 30 years old are the most exposed. We also conclude that despite the remaining sample being at lower risk, overall, the emotional impact is overwhelming. Finally, the risk due to unfavorable attitudes towards lockdown by Covid-19 are again men from 18 to 30 years old and, in general, entrepreneurs.

Within the inferential results, observed perceived significant differences in the vulnerability of men concerning women. The same goes for people younger than 50 years old, which reveals a possible risk profile.

We also verified a strong and direct correlation between attitudes' affective, cognitive, and behavioral factors.

We found that the data fit a linear correlation that allowed us *to* conclude that the contagion risk among Panamanians is mainly due to the affective factor. People are incapable of managing their emotions.

Finally, we highlight the low number of studies in Panama related to psychosocial risk and studies associated with the pandemic.

Conflict of interest

The authors declare that they do not have a competing interest in conducting and reporting this study. This research has been shown following the American Psychology Association Code of Conduct and the authors' national ethics guidelines. Participation was voluntary, and anonymity has been guaranteed. The submitted work is an original manuscript and has not been published entirely nor in part in other journals or media outlets.

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References:

1. Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. In L. Berkowitz (Ed.), *Advances in experimental social psychology*, 20. San Diego, CA: Academic Press.
2. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
3. Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
4. Barón, R. A & Byrne, D. (2005). *Psicología Social*. Madrid: Pearson / Prentice Hall
5. Bischof, E., Oertelt-Prigione, S., Morgan, R., Klein, S. L., (2020). Towards Precision Medicine: Inclusion of Sex and Gender Aspects in COVID-19 Clinical Studies-Acting Now before It Is Too Late-A Joint Call for Action. *International Journal of Environmental Research and Public Health*, 17(10). <https://doi.org/10.3390/ijerph17103715>
6. Buzzi, C., Tucci, M., Ciprandi, R., Brambilla, I., Caimmi, S., Ciprandi, G., & Marseglia, G. L. (2020). The psychosocial effects of COVID-19 on Italian adolescents' attitudes and behaviors. *Italian Journal of Pediatrics*, 46(1), 1–7. <https://doi.org/10.1186/s13052-020-00833-4>
7. Calhoun J. B. (1962). Population density and social pathology. *Scientific American*, 306: 139-48.
8. Calhoun J. B. (January 1973). Death squared: The explosive growth and demise of a mouse population. *Proceedings of the Royal Society of Medicine*, 66 (1 Pt 2) 80-88.
9. Chatterjee, S., Bhattacharyya, R., Bhattacharyya, S., Gupta, S., Das, S., & Banerjee, B. (2020). Attitude, practice, behavior, and mental health impact of COVID-19 on doctors. *Indian Journal of Psychiatry*, 62(3), 257–265. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_333_20
10. Contreras-Ibáñez, C., Flores, R., Reynoso-Alcántara, V., Pérez-Gay, F., Castro, C., & Martínez, L. (2/jun/2020). Socioeconomic and situational conditions associated with stress, at the start of the COVID-19 pandemic. *Entorno UDLAP. Edición especial*. https://drive.google.com/file/d/1T9NwVqgd-Sj3HhFs_PKQ3i34_df7jrQT/view?fbclid=IwAR2s3KTsuhGYByvx8gBaBIBKIIQ6-v0gM9aTeEzVmTkDslmZcvJiMCqIn_U
11. Czeisler, M. É., Tynan, M. A., Howard, M. E., Honeycutt, S., Fulmer, E. B., Kidder, D. P., Robbins, R., Barger, L. K., Facer-Childs, E. R., Baldwin, G., Rajaratnam, S. M. W., & Czeisler, C. A. (2020). Public Attitudes, Behaviors, and Beliefs Related to COVID-19, Stay-at-Home Orders, Nonessential Business Closures, and Public Health

- Guidance - United States, New York City, and Los Angeles, May 5-12, 2020. *MMWR: Morbidity & Mortality Weekly Report*, 69(24), 751–758. <https://doi.org/10.15585/mmwr.mm6924e1>
12. Fernandes, M. (2020). Health belief model for coronavirus infection risk determinants. *RSP. Revista Saúde Pública*, 54 (47), 54:47. <http://doi.org/10.11606/s1518-8787.2020054002494>
 13. Hall, E. (2003). *La dimensión oculta*. México: Siglo XXI.
 14. Haney, C., Banks, W. C., & Zimbardo, P. G. (1973) A study of prisoners and guards in a simulated prison. *Naval Research Review*, 30, 4-17.
 15. INEC (2019) Estimación y proyección de la población de la República de Panamá, según sexo y edad al 1 de julio de 2020. Instituto Nacional de Estadística y Censo. Recuperado de https://www.inec.gob.pa/publicaciones/Default3.aspx?ID_PUBLICACION=499&ID_CATEGORIA=3&ID_SUBCATEGORIA=10
 16. Joo, H. & Kang, Y. (2020). COVID-19 Infection in South Korea: Focusing on age distribution of confirmed cases. *Journal of Pure & Applied Microbiology*, 14, 721–723. <https://doi.org/10.22207/JPAM.14.SPL1.08>
 17. Kundapur, R., Rashmi, A., Sachin M., Falia, K., Remiza R. A., & Bharadwaj, S. (2020). COVID-19 - Observations and speculations -- A trend analysis. *Indian Journal of Community Health*, 32(2), 300–305.
 18. Liotta, G., Marazzi, M. C., Orlando, S., & Palombi, L. (2020). Is social connectedness a risk factor for the spreading of COVID-19 among older adults? The Italian paradox. *PLoS ONE*, 1–7. <https://doi.org/10.1371/journal.pone.0233329>.
 19. Matus, E., Matus, L., Florez, A., Stanziola, M., Araguás, N., López, A., & Guerra, L. (2020). Estrés en Panamá por COVID-19. *Revista Cubana de Alternativas en Psicología*, 8 (24), 120-135. Recuperado de http://www.alfepsi.org/revista-alternativas-cubanas-en-psicologia-vol8-n24/?fbclid=IwAR1-Ug-seGUSfCBzxdSvV7V0cnZAtNxQP5SiNja2LM7f5oRGX7y-m2_ccAE
 20. Matus, E. & Matus, L. (2020). Escala de actitudes hacia el confinamiento por COVID-19-19. Propiedades psicométricas. DOI: 10.5281/zenodo.3840712. Repositorio COVID-19-. ZENODO.ORG. <https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fzenodo.org%2Frecord%2F3840712%23.XsiVx2hKjb0&data=02%7C01%7C%7C8199dc37acf840a78a7b08d7fec834a1%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C637258008134421474&>

- sdata=BfeWHuhexlCVRvwtrf5KRQpGKxpmsUkRfyi9Gs7TjF0%3
D&reserved=0
21. Matus, E. (9 de abril de 2020). Distancia social o espacio vital. La Estrella de Panamá. Recuperado de <https://www.laestrella.com.pa/nacional/200409/distancia-social-espacio-vital>.
 22. Matus, G. L. (1993). Manual de Psicología Social. México: Universidad Iberoamericana.
 23. McFadden, S. M., Malik, A. A., Aguolu, O. G., Willebrand, K. S., & Omer, S. B. (2020). Perceptions of the adult US population regarding the novel coronavirus outbreak. PLoS ONE, 15(4), 1–6. <https://doi.org/10.1371/journal.pone.0231808>
 24. MINSA-GORGAS (2020). Ministerio de Salud de la República de Panamá. Recuperado de <https://geosocial.maps.arcgis.com/apps/opdashboard/index.html#/2c6e932c690d467b85375af52b614472>
 25. Myers, D. (2009). Psicología Social. México: McGraw Hill.
 26. Rios-González, C. (2020). Knowledge, attitudes, and practices towards COVID-19 in Paraguayans during outbreaks: a quick online survey. Instituto Nacional de Salud. DOI: <https://doi.org/10.1590/SciELOPreprints.149>
 27. Shreyaswi Sathyanath, M., & Shashwath Sathyanath M. (2020). Stigma reduction and provision of mental health services in the public health response to COVID-19. Indian Journal of Community Health, 32(2), 269–272.
 28. Unda, S., Uribe, F., Jurado, S., García, M., Tovalín, H. & Juárez, A. (2016). Construction of a scale for assessing at work psychosocial risk factors in professors. Journal of Work and Organizational Psychology, 32 (2), 67-74. <https://doi.org/10.1016/j.rpto.2016.04.004>
 29. WHO (2020). Coronavirus disease (COVID-19) pandemic. World Health Organization. <https://www.who.int/home>
 30. Zimbardo, P. (1982). Pathology of Imprisonment, in D. Krebs (ed.), Readings in Social Psychology: Contemporary Perspectives, Second Ed. (Harper & Row, New York, NY), 249–251.

Appendix 1

Instruments and correlations.

A survey was carried out through Google forms ©, between April 17 and 30, 2020. The study had 233 participants (78 male and 155 female). The average age for males was 39 years old, and for females, it was 38. Descriptive statistics were employed to characterize the sample: 35% of the participants reported having studied at least a postgraduate degree, 54% the university

level, eight percent a technician, and three percent, studied secondary. A T-test was used to determine statistically significant differences in the Attitude of men and women towards lockdown. 16 of the 36 items resulted in statistically significant differences between men and women. Furthermore, women are at risk considering that the averages obtained are significantly lower than those of men in question 11. *I work from home* ($\bar{X} = 3.37$, d.s. 1.45), 36. *I study what I like* ($\bar{X} = 3.47$, d.s. 1.25), 33. *I exercise* ($\bar{X} = 2.96$, d.s. 1.34), y 34. *I talk with my friends* ($\bar{X} = 3.51$, d.s. 1.17).

For males, the situation is more delicate since items 13. *I feel confused* ($\bar{X} = 1.91$, d.s. 1.10), 14. *I feel vulnerable* ($\bar{X} = 2.08$, d.s. 1.15), 15. *I feel helpless* ($\bar{X} = 1.86$, d.s. 1.08), 17. *I feel in danger* ($\bar{X} = 2.15$, d.s. 1.22), 18. *I feel scared* ($\bar{X} = 2.24$, d.s. 1.19), 19. *I feel upset* ($\bar{X} = 1.78$, d.s. 1.04), 20. *I feel isolated* ($\bar{X} = 2.05$, d.s. 1.17), 21. *I feel angry* ($\bar{X} = 1.83$, d.s. 1.04), 22. *I feel uncertain* ($\bar{X} = 2.50$, d.s. 1.33), 24. *I feel worried* ($\bar{X} = 2.72$, d.s. 1.23), 25. *I feel imprisoned* ($\bar{X} = 1.90$, d.s. 1.11), 29. *I dance* ($\bar{X} = 2.47$, d.s. 1.48), they are significantly less than in women, in addition to the *affective factor* ($\bar{X} = 2.18$, d.s. 0.86).

Item Response Dimension

The participants' responses were subjected to an analysis called the reagent discrimination index, which identifies each item's effectiveness. In this case, the high scores were compared with the low ones through the parametric inferential statistics test for the T-Test for independent samples. The items (which are statistically different) are effective. Next, we tested the reliability analysis of the test, which allows verifying the possible generalization of the results to similar populations and their replicability (Dorantes, 2018). For this purpose, we decided to use the inferential statistical analysis called Cronbach's Alpha. The results show that the total scale is reliable because it presents a score $\alpha = 0.921$. In this case, it is a question of high external or global reliability. Subsequently, a construct validity analysis was performed through the so-called factor analysis statistic. For factor analysis, the method of principal components normalization Varimax with Kaiser-Meyer-Olkin was used, and it converged in 5 iterations. The items that make up the factors, the weights of the factor loadings, the corrected total item correlation (r_{it}), and the factors' reliability are detailed in the following tables.

Table A1. Factorial Structure of Attitudes towards the quarantine by Covid-19

Factor 1. Cognitive (Alpha = 0.925)			
Explained Variance = 23.00%			
No.	Reactivo	r_{it}	Carga
06	I inform myself about COVID-19	0.81	0.84
05	I wash my hands	0.81	0.83
16	I know how COVID-19 transmits	0.82	0.81

17	I know what to do in case that I am a COVID-19 patient.	0.76	0.76
07	I talk with my family about COVID-19	0.70	0.74
19	I can identify COVID symptoms.	0.76	0.74
54	I comply with the quarantine	0.70	0.71
02	I see the news	0.63	0.68
20	09. I know the Ministry of Health Decrees	0.69	0.68
01	I eat the necessary	0.57	0.63
03	I work from home	0.52	0.63
18	I forward trustworthy information	0.60	0.62

Table A2. Estructura Factorial de Actitudes ante la cuarentena por Covid-19

Factor 2. Cognitive (Alfa = 0.927)			
Explained Variance = 21.34%			
No.	Reactivo	r_{it}	Carga
42	I feel confused	0.76	0.81
31	I feel vulnerable	0.76	0.81
30	I feel defenseless	0.75	0.80
32	I feel overwhelm	0.68	0.74
40	I feel in danger	0.72	0.73
35	I feel scared	0.70	0.73
39	I feel annoyed	0.63	0.71
26	I feel isolated	0.64	0.69
36	I feel angry	0.61	0.69
43	I feel uncertain	0.65	0.69
41	I feel tired	0.63	0.68
29	I feel worried	0.65	0.67
25	I feel like a prisoner	0.56	0.62
37	I feel at risk	0.57	0.60
22	I Font trust the authorities	0.44	0.48

Table A3. Factorial Structure of Attitudes towards the quarantine by Covid-19

Factor 3. Behavioral (Alfa = 0.849)			
Explained Variance = 5.51%			
No.	Reactivo	r_{it}	Carga
50	I sing	0.61	0.78
51	I dance	0.56	0.72
49	Escribo	0.66	0.70
45	I do manual activities	0.57	0.63
48	I read	0.66	0.59
09	I do excercise	0.53	0.56
46	I chat with my friends	0.59	0.40
13	I watch Television	0.41	0.16
04	I study what I want	0.52	0.30

The instrument had external and internal reliability and content and construct validity, as shown in the previous tables.

Linear model

Linear regression was calculated from the factors to know the effect that each of them has on attitudes towards lockdown, finding a model $y = 2.95 + 0.61x$, with a linear $R^2 = 0.998$. This is shown in Graph A1. The relationship between attitude and affective, cognitive, and behavioral factors is established in Graph A2.

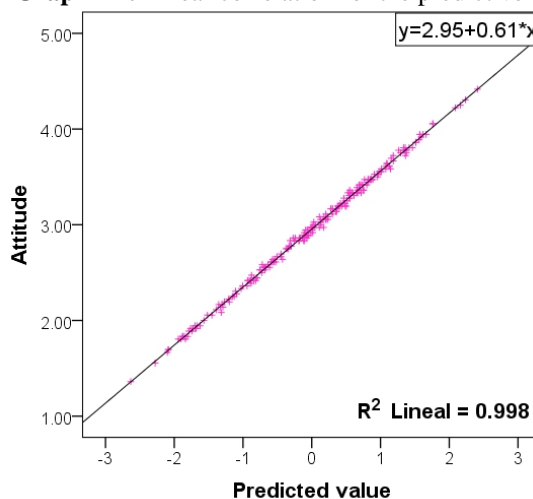
Graphs A2, A3, and A4 show the positive relationship that exists between attitudes and each one of the factors. The relationship between the cognitive factor and the Attitude is direct, positive, and strong, which is evidenced by the value of the linear $R^2 = 0.623$ (Graph A2).

The three factors that make up the attitudes allow us to visualize the dispersion in each of them. The lowest values in the distribution belong to the cognitive factor since the participants knew about the virus. Thus, they were aware of the prevention protocol.

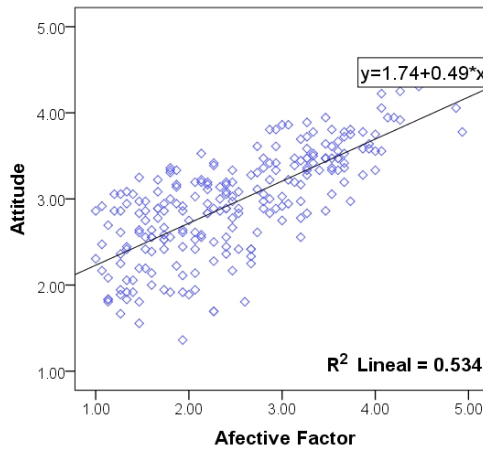
The relationship between the affective factor and the Attitude is direct, positive, and moderate, which is evident in the value of the linear $R^2 = 0.534$. For the affective factor, there is greater dispersion in the responses, possibly due to changes in the way they managed their emotions. This is summarized in Graph A3.

The relationship between the behavioral factor and Attitude is direct, positive, and weak, evidenced by the value of linear $R^2 = 0.379$. The largest dispersion is perceived in the behavioral factor; these values could be related to the population's autonomy even when the Health Authorities instituted curfews and a full quarantine. The relationship is shown in Graph A4.

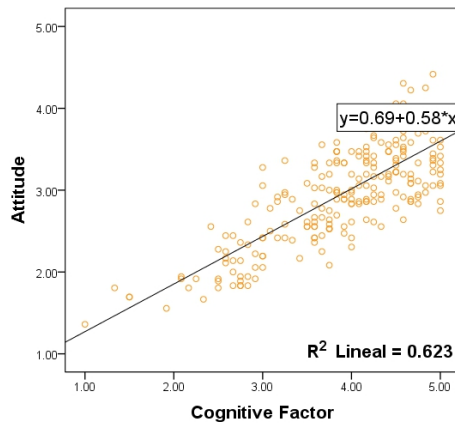
Graph A1. Linear correlation for the predictive model.



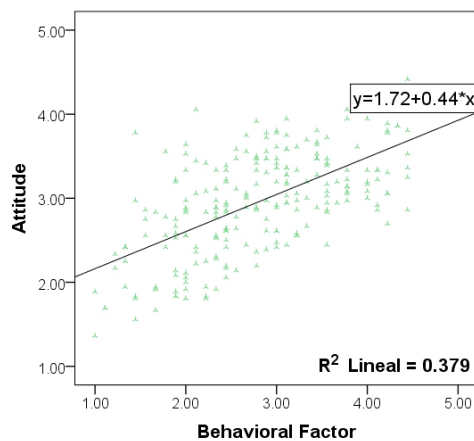
Graph A2. Linear correlation for the affective factor v. Attitude



Graph A3. Linear correlation for the cognitive factor v. Attitude. The highest dispersion is observed in this factor



Graph A4. Linear correlation for the behavior factor v. Attitude





ESJ Social Sciences

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Resumen

Este artículo se centra en las competencias docentes, las cuales se basan en la diversidad de contextos y planes de acción, lo que da como resultado muchos materiales didácticos profesionales. Por tanto, se realizó un estudio con enfoque cualitativo y alcance descriptivo para definir la precepción y la importancia de las competencias tecnológicas de los docentes; en consecuencia, bajo un diseño no experimental se determinó los ejes principales (Área Pedagógica; Aspectos Sociales, Éticos y Legales; Aspectos

Técnicos y Gestión Escolar, Desarrollo Profesional). También refleja el impacto de este enfoque en la capacidad de formar profesionales. En la actualidad, el rol del docente es fundamental para utilizar todo el potencial que brinda la tecnología para capacitar y potenciar las habilidades de los estudiantes. Con este fin, los profesores no solo necesitan tener conocimientos básicos de digital, sino también deben ser capaces de integrar las tecnologías de la información y la comunicación (TIC) en la práctica docente, y no cabe duda de que la formación inicial es la clave. Si bien es importante, el uso de las TIC sin embargo, los estudiantes formados no siempre obtiene un nivel suficiente durante el período de formación, por otro lado, no se dispone de herramientas suficientes para evaluar la adquisición de esta capacidad. El propósito de este trabajo es explorar las capacidades docentes, para lo cual se diseñó y desarrolló una nueva herramienta que aprovecha las potencialidades del entorno docente virtual para evaluar la ejecución o desempeño.

Palabras Claves: TIC, Competencias Docentes, Instituto, Profesional, Habilidades, Destrezas

Teaching Competences At The Technological Level As Sustainability Of Learning In Virtual Learning Environments

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Abstract

This article focuses on teaching competencies, which are based on the diversity of contexts and action plans, resulting in many professional teaching materials. Therefore, a study with a qualitative approach and descriptive scope

was carried out to define the perception and importance of the technological competences of teachers; Consequently, under a non-experimental design, the main axes were determined (Pedagogical Area; Social, Ethical and Legal Aspects; Technical Aspects and School Management, Professional Development). It also reflects the impact of this approach on the ability to train professionals. Currently, the role of the teacher is essential to use the full potential that technology offers to train and enhance the skills of students. To this end, teachers not only need to have basic knowledge of digital, but they must also be able to integrate information and communication technologies (ICT) into teaching practice, and there is no doubt that initial training is the key. . Although the use of ICT is important, however, the trained students do not always obtain a sufficient level during the training period, on the other hand, there are not enough tools available to assess the acquisition of this ability. The purpose of this work is to explore teaching capacities, for which a new tool was designed and developed that takes advantage of the potential of the virtual teaching environment to evaluate performance.

Key Words: TIC, Teaching Skills, Institute, Professional, Skills, Abilities

Introducción

Teniendo en cuenta la ambigua diversidad y el amplio entorno de estas palabras, no es fácil resolver el problema de la capacidad docente, al igual que muchos otros términos educativos. Por lo tanto, por un lado, se necesita posicionar un amplio campo conceptual de capacidades que en los últimos diez años ha tenido un tremendo despegue, lo que requiere posiciones teóricas y prácticas específicas. En este sentido, las palabras de Jiménez son explicativas cuando enfatiza que las competencias docentes están conformadas por un grupo de personas heterogéneas con diferentes ocupaciones, es difícil distinguir, conceptualizar, determinar responsabilidades y asignar funciones. Diferentes antecedentes, la formación inicial, los conceptos teóricos y prácticos de la vida y el nivel de trabajo, la diversidad de situaciones en las que deben trabajar, el y método de formación, la profesión, los materiales que deben utilizar o diseñar, la diversidad de grupos destinatarios solo agrega complejidad a la nueva "especialidad", que no se incluye en la mayoría de las capacidades.

La tecnología está creciendo en nuestra vida social, entorno laboral y, por supuesto, entorno educativo. La tecnología se ha convertido en una realidad en el aula, pero en muchos casos, los obstáculos provocados por la organización escolar inflexible, la falta de alfabetización cultural y digital, e incluso la falta o insuficiencia de formación docente en TIC en el aula, son un desperdicio de realidad. La educación ha experimentado una revolución: la revolución de las habilidades digitales. La educación está experimentando

nuevos cambios, a través de la posibilidad de la formación virtual han surgido nuevos paradigmas, métodos y modelos para reducir la brecha entre la distancia y el tiempo, pero ¿cómo se preparan los docentes para esta revolución? El escenario educativo al que se enfrentan los profesores virtuales es que los estudiantes no solo requieren nuevos métodos de aprendizaje, sino también nuevos métodos de adquisición y generación de conocimientos. La tarea del docente es investigar, aprender y compartir este método de enseñanza, y desarrollar una nueva habilidad: la habilidad digital. Las herramientas de comunicación e interacción que brindan las tecnologías de la información pueden permitir a los estudiantes contar con diversos programas para promover el ecosistema de aprendizaje, realizando y mejorando así la estructura de la información y la generación de conocimiento (Católica del Norte Fundación Universitaria, 2019).

Las tecnologías de la información y la comunicación se pueden definir como una herramienta tecnológica para preparar, almacenar y difundir digitalmente información basada en el uso de redes de telecomunicaciones multimedia. También pueden entenderse como la integración de tres tecnologías separadas (audiovisual, telecomunicaciones e informática) que ya existen, pero que ahora están integradas en la producción, almacenamiento y distribución digital de cualquier tipo de datos. Éstas incluyen: computadoras, dispositivos multimedia personales, teléfonos móviles, redes sociales, Internet, televisión digital, sistemas de navegación digital, libros electrónicos, etc (Ambriz Muñoz, 2016).

El campo de la educación es donde se desarrollan las generaciones futuras, y la tecnología forma parte del desarrollo, y son dos elementos que deben ir de la mano. Para apoyar el cambio de paradigma educativo establecido por la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO, 2017), este debe tener características específicas, tales como: extender el tiempo y el espacio de aprendizaje: las aulas no son espacios limitados, y los estudiantes pueden participar en redes de conocimiento para aprender nuevas experiencias de aprendizaje en cualquier momento, en cualquier lugar: proporcione múltiples aplicaciones para educación, plataformas, materiales accesibles e interactivos. Construcción cooperativa del conocimiento: pero también de la intervención de los docentes como comunidades de aprendizaje. Gestión del conocimiento basada en evidencias: es posible brindar apoyo o establecer un ritmo relacionado mediante el seguimiento de la situación de aprendizaje de cada alumno.

Muchos docentes de educación superior no tienen los conocimientos técnicos para dominar las tecnologías más utilizadas en el aula, o simplemente no tienen la información sobre las ventajas que pueden brindar en el proceso educativo. En cualquier caso, todavía queda un largo camino por recorrer, y

aún queda mucho trabajo por hacer si se quiere aprovechar al máximo la motivación e innovación de los medios digitales en el aula y las ventajas de ser más educativos y comunicativos. Los profesores necesitan recibir una formación especial que les permita afrontar estos nuevos retos y que les ayude a adaptarse a los nuevos modelos sociales (Cansigno Gutierrez, 2020).

Hoy en día, la relación entre docentes y estudiantes debe ser participativa, lo cual ocurre al compartir conocimientos y herramientas de vida útiles y trascendentes los cuales deben ser utilizados así como las tecnologías de la información y la comunicación para transmitir los puntos de vista a los estudiantes. Las materias que imparten, la investigación, trabajo, ricas relaciones entre los demás, vida y, lo que es más importante, intereses de autoformación. Los docentes deben actualizarse constantemente en la formación profesional y hacer una contribución significativa al desarrollo personal y social de una nueva generación de personas que están en constante aprendizaje en las condiciones actuales (Mercado Borja, 2018).

Según Díaz (2016) menciona que los educadores deben tener la capacidad de motivar, organizar e incorporar el conocimiento popular al proceso de formación de acuerdo al entorno en el que se desenvuelven. También puedes diseñar, reformar y probar nuevas estrategias didácticas para incentivar y promover los procesos de enseñanza, formación y desempeño de los estudiantes. También es importante promover la autogestión, autoformación y autoevaluación de los estudiantes; así como aspectos relacionados con el proceso de integración y compromiso de la religión, la moral y los valores sociales, de esta manera cooperar con la escuela para salvar nuestra autenticidad e identidad nacional.

De acuerdo con Ambriz (2016) en el estudio titulado la competencia digital de los estudiantes - Estudio de caso: alumnos de nuevo ingreso a la Escuela Superior de Ingeniería Mecánica y Eléctrica Unidad Azcapotzalco indica que los estudiantes que ingresen a niveles superiores se verán inmersos en el mundo tecnológico y pasarán a formar parte de la cultura digital, por lo que utilizan las TIC en diferentes áreas de la vida diaria (especialmente en el ámbito social); sin embargo, se puede especular que los estudiantes pertenecen a la generación de Internet, para que las mismas se puedan utilizar de forma eficaz.

Francesc Marc (2016) en el estudio denominado la competencia digital docente: análisis de la autopercepción y evaluación del desempeño de los estudiantes universitarios de educación por medio de un entorno 3D afirma que el papel de los docentes es inculcar a los estudiantes en el uso de todo el potencial que brinda la tecnología para capacitar y mejorar las habilidades de los mismos. Para ello, los profesores no solo necesitan tener conocimientos básicos en el ámbito digital, sino que también deben ser capaces de integrar las tecnologías de la información y la comunicación en la práctica docente.

Este trabajo permite visualizar entornos virtuales 3D. Estos entornos cuentan con una variedad de evidencias y estrategias de evaluación, que pueden lograr observaciones ricas y precisas del CD de los estudiantes. A partir de estos resultados, se proponen una serie de principios y medidas de diseño para mejorar el CD de los estudiantes. El DC de estos futuros profesores.

Las tic en la educación

El campo de la educación también ha tenido un impacto debido a los desarrollos tecnológicos en las últimas décadas, no solo ha realizado procesos de gestión modernos, sino que también ha creado nuevos espacios y nuevos métodos de formación (Ambriz Muñoz, 2016).

Proceso de interactividad educativa mediada con tic

Durante las últimas décadas, las instituciones educativas han ido integrando diversas tecnologías para diversos fines, desde el proceso de enseñanza intermedia hasta el establecimiento de alianzas estratégicas interinstitucionales, lo que ha dado lugar a la introducción de tecnología, administración y prácticas docentes en la gestión educativa. Este conocimiento se utiliza en última instancia para concebir, difundir y aplicar nuevos conocimientos, y hacer de estas entidades una institución de formación de alta calidad a nivel nacional e internacional. Por tanto, es necesario determinar el diseño cualitativo virtual, el valor cualitativo y, en este sentido, ser coherente con determinadas políticas institucionales. Asimismo, la organización formadora desarrollará, aplicará el modelo de seguimiento y lo incorporará al proceso de interacción virtual. Ahora, estos modelos deben contener atributos, indicadores e indicadores cualitativos y cuantitativos para ayudar a probar y cuantificar el proceso interactivo en la plataforma de capacitación en línea. Por lo tanto, se propone algunos atributos y métricas. Estos atributos y métricas ayudan a recopilar o actualizar los requisitos docentes y técnicos para encontrar oportunidades de mejora, de modo que el desarrollo del proceso interactivo cumpla con las condiciones, optimice la interacción social y sea significativo para la apertura. . La formación contribuye a facilitar la toma de decisiones y ayuda a determinar cómo alcanzar los objetivos en un entorno virtual (Mercado Borja, 2018).

Tipos de componentes del EVA

Componente Técnico del EVA

Funcionalidad

Para la funcionalidad existen cuatro métricas como el análisis de conformidad, análisis de seguridad, auditoría operativa y el análisis de fiabilidad. El primero tiene la capacidad del proceso interactivo para satisfacer las necesidades de la tecnología educativa; el segundo determina la

confiabilidad del proceso de interacción en un corto intervalo de tiempo, incluida la pérdida de datos, el número de fallas que pueden ocurrir y la reciprocidad de estos eventos; el tercero permite explicar el grado de efectividad técnica de la realización según los atributos que puedan estar involucrados en el proceso de interacción y el cuarto indica el grado de tolerancia a fallos en la red de aprendizaje virtual y la capacidad para responder a situaciones inesperadas (Mercado Borja, 2018).

Usabilidad

Para la usabilidad se determina cuatro métricas como la facilidad de aprehensión que puede comprender, operar o monitorear fácilmente el proceso de interacción con satisfacción; capacidad de configuración que ayuda a determinar la flexibilidad de los servicios que brinda la herramienta: foros, tareas, mensajes privados, chats y videoconferencias; herramientas de seguimiento que evalúa herramientas utilizadas para monitorear foros, tareas, mensajes privados, chats y videoconferencias para evaluar la cantidad de eventos que generan los docentes en cada herramienta EVA y consumo de recursos refiere al uso de recursos, contenidos y exámenes audiovisuales (Mercado Borja, 2018).

Velocidad de trabajo

En cuestiones de velocidad de trabajo existe una métrica como el tiempo de espera que permite medir el desempeño de la asignatura y el tiempo de respuesta en caso de falla durante el uso de herramientas TIC (Mercado Borja, 2018).

Componente Educativo del EVA

Funcionabilidad

La funcionabilidad cuenta con dos matrices como la idoneidad educativa que determina si el proceso interactivo es adecuado para el desarrollo general de los alumnos de acuerdo con las funciones educativas y administrativas; y la potencialidad didáctica que evalúa en qué medida los diversos recursos que proporciona la plataforma de formación online facilitan el proceso docente y apoyan las actividades del curso (Mercado Borja, 2018).

Usabilidad

Para la usabilidad se establece dos métricas como la facilidad de aprendizaje que mide el tiempo necesario para actuar con cierto nivel de eficiencia cuando los educadores acumulan conocimientos y utilizan herramientas y recursos para lograr un cierto nivel de desempeño y efectividad de uso que permite conocer en qué medida el proceso de interacción ayuda a

los participantes educativos a alcanzar las metas de aprendizaje e interacción social a partir del comportamiento de los recursos. (Mercado Borja, 2018).

Eficiencia

Para la eficiencia del componente educativo se toma en cuenta una métrica, utilidad formativa. La utilidad formativa se refiere a la ejecución de procesos interactivos relacionados con el trabajo colaborativo, el logro de las metas formativas y el uso de los recursos que brindan las herramientas TIC (Mercado Borja, 2018).

Se puede observar que los estándares de competencias TIC propuestos por Reino Unido se centran en competencias que se refieren específicamente al desarrollo del proceso de enseñanza. Adicional, la Teacher Training Agency (2001) mejoró y concretó esta recomendación porque amplió las capacidades a otras áreas, como las relacionadas con el desarrollo y la renovación profesional y el establecimiento de relaciones interpersonales. Entre los trabajos sobre las capacidades en tecnologías de la información de los docentes realizados en América del Sur, es necesario enfatizar la propuesta del Ministerio de Educación de Chile (2006), que parte de la necesidad de más docentes que en la sociedad actual para responder a las demandas de esta. En tal sentido, los docentes han de poder integrar y utilizar los recursos técnicos y digitales tanto en las prácticas docentes como en el desarrollo profesional.

Tabla 1. Dimensiones de las Competencias Docentes a Nivel Tecnológico

DIMENSIÓN	DEFINICIÓN
Área pedagógica	Los profesores del mañana adquirirán y demostrarán la aplicación de las TIC en los planes de estudios escolares actuales para apoyar y ampliar el aprendizaje y la enseñanza.
Aspectos sociales, éticos y legales	Los futuros docentes saben que los aspectos morales, legales y sociales relacionados con el uso de los recursos y contenidos informáticos en Internet se difunden adecuadamente entre los estudiantes, y los derechos que deben ser tomados en cuenta al utilizar las TIC.
Aspectos técnicos y Gestión Escolar.	Los futuros profesores dominarán las habilidades relacionadas con el sentido común de las TIC y utilizarán herramientas de productividad e Internet para desarrollar habilidades y capacidades para el aprendizaje de nuevos hardware y software. Adicional, las utilizarán para apoyar el trabajo en el campo administrativo, ya sea en la gestión de la enseñanza o en la gestión de instituciones de apoyo.

Desarrollo profesional	Los futuros docentes utilizarán las TIC como medio de profesionalización y desarrollo profesional, aprenderán y adquirirán diversos recursos para mejorar la práctica, y promoverán el intercambio de experiencias a través del proceso de reflexión con los diversos participantes de la educación, a fin de lograr un mejor proceso de enseñanza y aprendizaje.
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Elaborado: Ministerio de Educación de Chile

Fuente: (Ministerio de Educación de Chile, 2006)

Este conjunto de estándares es específicamente para profesores y personal universitario, por lo cual se entiende que además de éstos, también se consideren las dimensiones únicas de la docencia universitaria, como las dimensiones relacionadas con la investigación, y estos estándares se pueden aplicar perfectamente (Teacher Training Agency, 2001).

Metodología

Con el fin de determinar los aspectos relacionados con el análisis y evaluación del proceso interactivo en el entorno virtual de aprendizaje, se realizó un estudio con enfoque cualitativo y alcance descriptivo para definir la percepción y la importancia de las competencias tecnológicas de los docentes; en consecuencia, bajo un diseño no experimental se determinó los ejes principales (Área Pedagógica; Aspectos Sociales, Éticos y Legales; Aspectos Técnicos y Gestión Escolar, Desarrollo Profesional) para con el instrumento de recolección de información.

Como técnica e instrumento de recolección de información se realizó encuestas dirigidas a docentes. Además, se consideraron dos puntos de vista interesantes: socios tecnológicos y educativos. A través de la ejecución del proceso de compilación y análisis, se puede generar un método importante para evaluar atributos, indicadores y sistemas de indicadores para evaluar el proceso interactivo en escenarios no reales. Cabe señalar que estos métodos ayudan a establecer un marco de referencia para identificar y priorizar los factores clave en el sistema interactivo, comprender la dinámica y facilitar la toma de decisiones para resolver problemas que afectan a los participantes de la educación.

En consecuencia a la revisión bibliográfica y teórica descrita anteriormente se determina que para analizar el objeto de estudio se deben de considerar las siguientes dimensiones (ver anexo 1).

Población

En el presente trabajo de investigación la población de estudio son los docentes del Instituto Superior Tecnológico Juan Bautista Aguirre (ISTJBA).

Se realizó un muestreo no probabilístico por conveniencia a todos los docentes del Instituto Superior Tecnológico Juan Bautista Aguirre (ISTJBA).

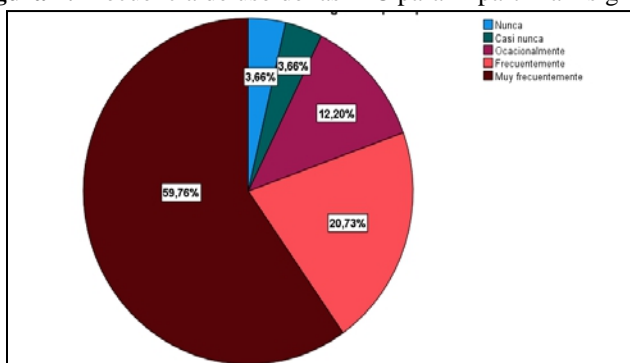
Resultados

Tabla 2. Frecuencia de uso de las TIC para impartir la Asignatura

	N	%
Nunca	3	3,7%
Casi nunca	3	3,7%
Ocasionalmente	10	12,2%
Frecuentemente	17	20,7%
Muy frecuentemente	49	59,8%

Fuente: Encuesta realizada a los docentes del ISTJBA
 Elaboración propia

Figura 1. Frecuencia de uso de las TIC para impartir la Asignatura



Fuente: Elaboración propia

Interpretación:

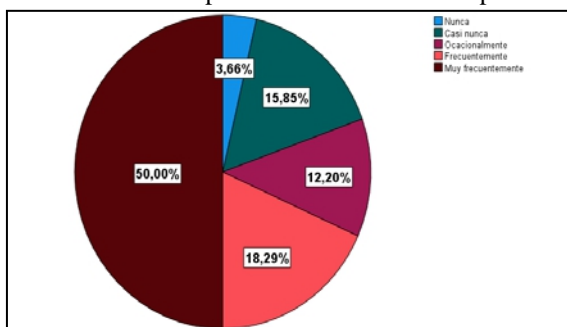
Según datos de la tabla 3 en cuanto a la frecuencia de usos de las TIC de los docentes para impartir la Asignatura, se obtuvo que en la mayoría con un 59,8% los docentes del Instituto Superior Tecnológico Juan Bautista Aguirre las usan muy frecuentemente y en un porcentaje mínimo del 3,7% nunca lo hace.

Tabla 3. Frecuencia de planificación de clase adaptado a las TIC

	N	%
Nunca	3	3,7%
Casi nunca	13	15,9%
Ocasionalmente	10	12,2%
Frecuentemente	15	18,3%
Muy frecuentemente	41	50,0%

Fuente: Encuesta realizada a los docentes del ISTJBA
 Elaboración propia

Figura 2. Frecuencia de planificación de clase adaptado a las TIC



Fuente: Elaboración propia

Interpretación:

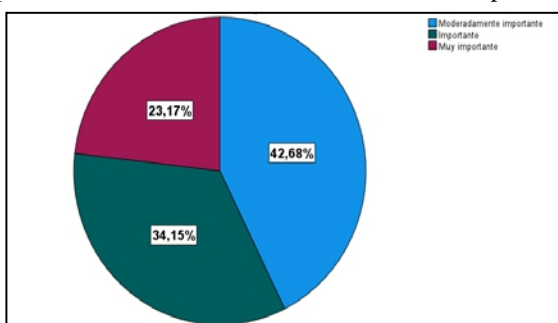
Según datos de la tabla 4, un 50% de los docentes muy frecuentemente planifican las clases adaptándose a las TIC para impartirlas a los estudiantes; seguido con un 18,3%, 15,9%, 12,2% de los maestros que frecuentemente, casi nunca y ocasionalmente programan las clases respectivamente; y tan solo un 3,7% del total que nunca las programan.

Tabla 4. Importancia del uso de las TIC dentro de las competencias docentes

	N	%
Moderadamente importante	35	42,7%
Importante	28	34,1%
Muy importante	19	23,2%

Fuente: Encuesta realizada a los docentes del ISTJBA
 Elaboración propia

Figura 3. Importancia del uso de las TIC dentro de las competencias docentes



Fuente: Elaboración propia

Interpretación:

Según datos de la tabla 5 el 42,7% o 35 docentes del ISTJBA consideran importante el uso de las TIC para la enseñanza y aprendizaje; un 34,1% o 28 maestros manifiestan que las mismas son importantes y un 23,2%

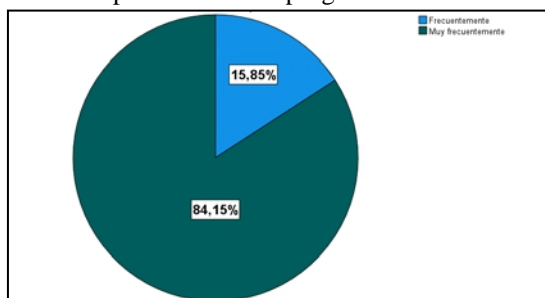
o 19 pedagogos indicaron que es muy importante usarlas con los estudiantes en el proceso de enseñanza.

Tabla 5. *Frecuencia para utilizar los programas de edición de documentos*

	N	%
Frecuentemente	13	15,9%
Muy frecuentemente	69	84,1%

Fuente: Encuesta realizada a los docentes del ISTJBA
 Elaboración propia

Figura 4. Frecuencia para utilizar los programas de edición de documentos



Fuente: Elaboración propia

Interpretación:

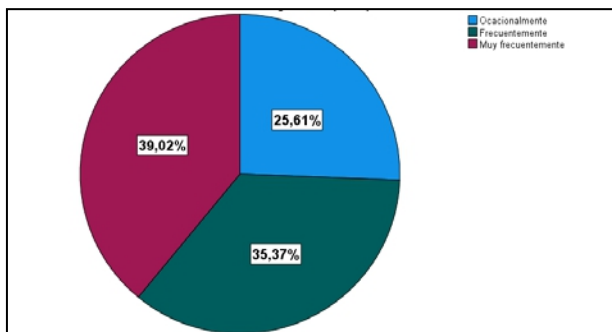
Según datos de la tabla 6 con un 84,1% o 69 docentes del ISTJBA muy frecuentemente utilizan los programas de edición de documentos y un 15,9% o 13 pedagogos frecuentemente dan uso a los programas en el proceso de enseñanza y aprendizaje de los estudiantes.

Tabla 6. *Frecuencia para formular preguntas sobre temas de enseñanza y aprendizaje*

	N	%
Ocasionalmente	21	25,6%
Frecuentemente	29	35,4%
Muy frecuentemente	32	39,0%

Fuente: Encuesta realizada a los docentes del ISTJBA
 Elaboración propia

Figura 5. Frecuencia para formular preguntas sobre temas de enseñanza y aprendizaje



Fuente: Elaboración propia

Interpretación:

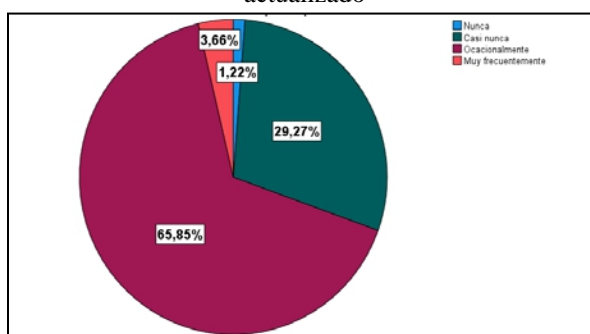
Según datos de la tabla 7 con respecto a la frecuencia que poseen los docentes del ISTJBA para formular preguntas de enseñanza y aprendizaje, en general lo hacen pero en periodicidad diferentes; el 39% o 32 de ellos lo hacen muy frecuentemente; el 35,3% o 29 frecuentemente y el 25,6% lo hacen ocasionalmente.

Tabla 7. Frecuencia para utilizar recursos tecnológicos e informativos para mantenerse actualizado

	N	%
Nunca	1	1,2%
Casi nunca	24	29,3%
Ocasionalmente	54	65,9%
Muy frecuentemente	3	3,7%

Fuente: Encuesta realizada a los docentes del ISTJBA
 Elaboración propia

Figura 6. Frecuencia para utilizar recursos tecnológicos e informativos para mantenerse actualizado



Fuente: Elaboración propia

Interpretación:

Según datos de la tabla 8 en cuanto a la frecuencia del uso de los recursos tecnológicos e informáticos para que los docentes del ISTJBA se

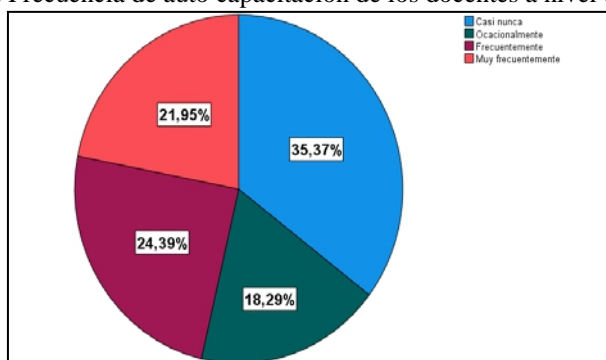
mantengan actualizados, se obtuvo que en la mayoría con un 65,9% de ellos los usan ocasionalmente y en un porcentaje mínimo del 1,2% nunca los utilizan.

Tabla 8. Frecuencia de auto capacitación de los docentes a nivel tecnológico

	N	%
Casi nunca	29	35,4%
Ocasionalmente	15	18,3%
Frecuentemente	20	24,4%
Muy frecuentemente	18	22,0%

Fuente: Encuesta realizada a los docentes del ISTJBA
 Elaboración propia

Figura 7. Frecuencia de auto capacitación de los docentes a nivel tecnológico



Fuente: Elaboración propia

Interpretación:

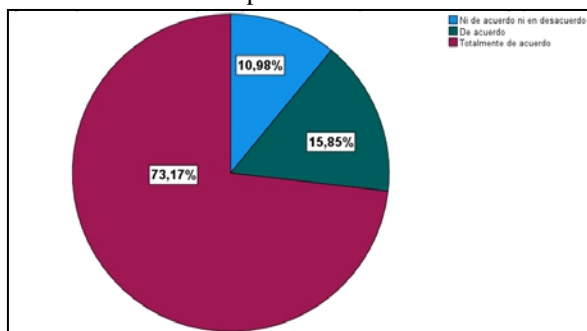
Según datos de la tabla 9, un 35,4% de los docentes casi nunca se auto capacitan a nivel tecnológico adaptándose a las TIC para impartirlas a los estudiantes; seguido con un 24,4%, 22% de los maestros que frecuentemente y muy frecuentemente se auto preparan para impartir las clases respectivamente; y tan solo un 18,7% del total que ocasionalmente se auto educan.

Tabla 9. Importancia del aprendizaje de forma autónoma para usar herramientas y aplicaciones

	N	%
Ni de acuerdo ni en desacuerdo	9	11,0%
De acuerdo	13	15,9%
Totalmente de acuerdo	60	73,2%

Fuente: Encuesta realizada a los docentes del ISTJBA
 Elaboración propia

Figura 8. Importancia del aprendizaje de forma autónoma para usar herramientas y aplicaciones



Fuente: Elaboración propia

Interpretación:

Según datos de la tabla 10 el 73,2% o 60 docentes del ISTJBA están totalmente de acuerdo con el aprendizaje autónomo para el uso de las herramientas y aplicaciones adaptándose a las TIC para la enseñanza y aprendizaje; un 15,9% o 13 maestros manifiestan que están de acuerdo y un 11% o 9 pedagogos indicaron estar ni de acuerdo ni en desacuerdo con el aprendizaje autónomo para impartir las clases a los estudiantes.

Conclusión

En el contexto español, los resultados obtenidos en este estudio nos permiten dar un paso más allá en los que respecta a competencias TIC del profesorado universitario. Además de este conjunto de indicadores, contar con un modelo específico para organizar y estructurar las capacidades de los docentes superior es un aspecto clave para organizar y estructurar propuestas de mejora adecuada y coherente con las necesidades del pedagogo a nivel superior.

La mayoría de los docentes que participan en la actividad son conscientes del papel y la importancia de las tecnologías de la información y la comunicación para el futuro empleo de los estudiantes, lo que nos demuestra que los docentes involucrados comprenden que las tecnologías de la información y la comunicación son una herramienta clave para cualquier desempeño profesional. Cabe destacar que se utilizó una muestra de docentes que se desempeñan en todas las áreas.

Los docentes también otorgan gran importancia a las ricas prácticas de enseñanza que brindan las TIC y la posibilidad de comprender las buenas prácticas implementadas utilizando dichas tecnologías. Por otro lado, el conocimiento sobre la implementación de las tecnologías de la información de las políticas educativas obtenido desde la propia institución es un factor decisivo para que los docentes emprendan acciones. Conocer la política

educativa propia de la escuela, entre otras cosas, significa poder aprovechar todas las opciones que se ofrecen.

En cuanto al conocimiento y uso de la metodología en red, cualquier acción formativa debe producir no solo conocimiento, sino también cómo aplicarlo. Conocer los buenos resultados producidos por el uso de diferentes métodos y saber cómo implementar estos métodos y ponerlos en práctica facilita que los docentes adopten diferentes métodos de red. La formación técnica por sí sola no es suficiente, el profesorado debe conocer las posibilidades que ofrecen las TIC para mejorar el aprendizaje de los alumnos, el potencial como recurso didáctico y las distintas posibilidades de utilizar las tecnologías de la información en los diferentes entornos docentes.

En cuanto a la formación del profesorado en TIC, hay que destacar que el profesorado no solo debe participar en actividades formativas estandarizadas, sino también buscar los propios recursos y recursos de información. En este sentido, será muy interesante incentivar el uso de herramientas como las redes sociales, a través de las cuales se puede facilitar de forma rápida y sencilla la comunicación y el acceso a diferentes fuentes de información.

References:

1. Ambriz Muñoz, C. G. (2016). La competencia digital de los estudiantes. Estudio de caso: alumnos de nuevo ingreso a la Escuela Superior de Ingeniería Mecánica y Eléctrica Unidad Azcapotzalco. Universidad Nacional de Chimborazo.
2. Cansigno Gutierrez, Y. (2020). Competencias Docentes: El rol del docente actual frente a la masiva utilización de las TIC. Lengua y Cultura.
3. Católica del Norte Fundación Universitaria. (2019). Las competencias digitales docentes y su importancia en ambientes virtuales de aprendizaje. Reflexiones y Saberes. Obtenido de <https://revistavirtual.ucn.edu.co/index.php/RevistaRyS/article/view/1069/1510>
4. Díaz, I. (2016). Las competencias TIC y la integración de las tecnologías de la información y comunicación de los docentes de la Universidad Católica del Maule. Uuniversidad Nacional De Chimborazo.
5. Francesc Marc , E. (2016). La Competencia Digital Docente. Análisis de la Autopercepción y Evaluación del Desempeño de los Estudiantes Universitarios de Educación por Medio de un Entorno 3D. <https://www.tdx.cat/handle/10803/291441#page=1>.
6. Mercado Borja, W. (2018). Análisis y evaluación de procesos de interactividad en entornos virtuales de aprendizaje. Trilogía Ciencia

Tecnología Sociedad,
<https://revistas.itm.edu.co/index.php/trilogia/article/view/1213>.

7. Ministerio de Educación de Chile. (2006). Estándares en Tecnologías de la. Ministerio de Educación de Chile. Obtenido de <http://portal.enlaces.cl/portales/tp3197633a5s46/>
8. Teacher Training Agency. (2001). Competencias Tecnológicas del Profesorado En Las Universidades Española. Revista de Educación.
9. UNESCO. (2017). Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura. Obtenido de http://www.unesco.org/new/es/media-services/single-view-tv-release/news/la_unesco_apoya_a_ecuador_en_el_desarrollo_de_politicas_pu/

Anexo 1

Preguntas enfocadas en las Dimensiones de las Competencias Docentes a Nivel Tecnológico

DIMENSIÓN	ENCUESTA
Área pedagógica	<ol style="list-style-type: none">1. ¿Con qué frecuencia selecciona Ud. las tecnologías de la información y la comunicación para el desarrollo de los contenidos de la asignatura que imparte?<ol style="list-style-type: none">a. Nuncab. Casi nuncac. Ocasionalmented. Frecuentementee. Muy frecuentemente2. ¿Con qué frecuencia desarrolla Ud. la planificación de su clase adaptando las TIC a su programa y a las necesidades de conocimiento de los estudiantes?<ol style="list-style-type: none">a. Nuncab. Casi nuncac. Ocasionalmented. Frecuentementee. Muy frecuentemente

Aspectos sociales, éticos y legales	<p>1. ¿Qué tan importante es para usted aplicar los principios legales y éticos asociados al uso de las TIC dentro de las competencias docentes?</p> <ul style="list-style-type: none">a. Moderadamente importanteb. Importantec. Muy importante <p>2. ¿Con qué frecuencia utiliza Ud. programas de edición de documentos (Word, Excel, Power Point, etc para impartir su clase?</p> <ul style="list-style-type: none">a. Frecuentementeb. Muy Frecuentemente
Aspectos técnicos y Gestión Escolar.	<p>1. ¿Con qué frecuencia Ud. formula y justifica una pregunta o duda sobre temas de la enseñanza y aprendizaje de las asignaturas que imparte?</p> <ul style="list-style-type: none">a. Ocasionalmenteb. Frecuentementec. Muy Frecuentemente <p>2. ¿Con qué frecuencia Ud. utiliza recursos tecnológicos e informativos para mantenerse actualizado en las disciplinas que enseña?</p> <ul style="list-style-type: none">a. Nuncab. Casi nuncac. Ocasionalmented. Muy Frecuentemente
Desarrollo profesional	<p>1. ¿Con qué frecuencia Ud. se auto capacita a nivel tecnológico?</p> <ul style="list-style-type: none">a. Casi nuncab. Ocasionalmentec. Frecuentemented. Muy Frecuentemente <p>2. ¿Qué tan importante considera el aprendizaje de forma autónoma para el uso de herramientas y aplicaciones?</p> <ul style="list-style-type: none">a. Ni de acuerdo ni en desacuerdob. De acuerdoc. Totalmente de acuerdo

Elaborado por Los Autores



ESJ Social Sciences

Risk Assessment Providing Solid Grounds For Strategic Management In The Insurance Industry

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Abstract

The insurance industry is undergoing more turbulence than any other industry since nowadays it is faced with a variety of strategic risks—emerging threats and challenges: change in regulation, customer behavior, distribution channels, competition, and new innovative technologies. The aim of this study is to propose strategic management directions towards risk assessment in the insurance companies, which could implicate the overall performance of many engaged in this sector. Given the growing importance of the insurance companies, profitability is considered as one of the key performance metrics which is under major influence of internal factors. This type of analysis is an important tool in determining the quick and decisive response of the managers to important new challenges and opportunities, especially in absence of a risk management regulatory framework. For this purpose, the data of 11 non – life insurance companies operating in North Macedonia from the period 2012 – 2019 is examined. The estimated model with random effects on panel data suggests a negative and significant influence of the loss ratio, the expense ratio, the retention rate, and the premium to surplus ratio on the profitability of non – life insurers, as measured by the return on assets (ROA), whereas the size has a positive impact on the profitability. The influence of remaining variables on the profitability was not found to be statistically significant. The obtained results were aligned in recommendations which can be used to potential future improvement and viable business strategies considering the

specific and vulnerable Macedonian insurance context.

Keywords: Strategic Management, Non – Life Insurance, Profitability; Firm – Specific Factors, Risk Management

Introduction

The insurance sector plays an important role within the financial sector in almost all developed and developing countries, contributing to economic development, increase of national wealth, efficient allocation of resources, reducing transaction costs, creating liquidity and enabling economies of scale in the investment activities (Haiss and Sümegi, 2008). As a result, the financial performance of the insurance companies is of great importance to various interested parties, such as policyholders, agents, shareholders, regulators, supervisors as well as policymakers. In this context, one question that naturally arises is how it can be measured, and what factors determine the profitability of the insurance companies.

No company is isolated but operates in a broader, dynamic system of mutual interactions. Factors that affect the profitability of insurance companies can be classified as internal or external factors. Due to their systemic nature, external factors affect the performance of the entire insurance sector to a certain extent. However, the differences in performance between individual companies operating in the same insurance sector can be explained by the influence of internal, firm-specific factors. Internal factors are dominant in determining financial results; they are specific to each company and are under the influence of the management. Profitability is one of the key determinants for success and a prerequisite for increasing competitiveness and market share. Also, profits attract investors and improve the level of solvency. The financial performance of insurance companies is also relevant in the macroeconomic context, as the insurance industry contributes to fostering economic growth and stability (Burca and Batrinca, 2014). When taking into consideration the insurance companies, the profitability should be analyzed in light of the concept of risk. Risk assessment is a research area that is gaining momentum, especially when taking into account the increased attention to the concept of risk in the business environment. This is in fact due to the greater awareness of risk after the series of corporate scandals, the global financial and economic crisis, and the intensification of regulatory requirements in the EU, including the Solvency II directive.

The coherent study of risk assessment in insurance companies, and the relationship between firm – specific factors, and profitability has recently enjoyed an increasing interest among researchers. Yet, despite the rising popularity of the topic, we have identified a lack of recent findings in the Macedonian non – life insurance sector, which has motivated us to enrich the

literature in this area. The main aim of this paper is to examine how firm – specific factors affect profitability and what are the strategic implications that arise from that relationship. Accordingly, knowing the direction and intensity of the impact of various internal factors is an important pillar in the process of making business and strategic decisions.

The Macedonian insurance sector is still small, with its total assets accounting for 3.4% of GDP (3.3% in 2018). Despite the accelerated growth in life insurance, non – life insurance is still prevailing (65.4% of the total assets in the insurance sector), within which, the motor third party liability insurance still being the most dominant class of insurance 52.3%. Although the great potential for future development is evident, Macedonian insurance has been improving slowly, lagging behind the EU level. In 2019, the insurance density rate measured as gross written premium per capita amounted to 5,099 Macedonian Denars (82.9 EUR), whereas the penetration rate (GWP / GDP) was 1.5%. However, the penetration, and density rates correlate with the standard of living and the attitude towards understanding, accepting and reduction of risk (NBRNM, 2019).

Guided by the targets and indicators used by the researchers in this field as well as those proposed by IMF (2003) and OECD (2016), within the scope of this paper a set of firm – specific indicators is defined, and their effect on the profitability of the Macedonian non – life insurance companies in the period between 2012 and 2019 is examined. This paper contributes to the existing literature by shedding light on the recent analysis of the influence of firm – specific factors on the profitability among non–life insurance companies to provide evidence for drawing coherent conclusions. Furthermore, this approach allows discussion of the results from a managerial point of view, and enables the concepts of profitability in the insurance sector and risk assessment to be linked with strategic management. Therefore, the obtained results are beneficial from both theoretical and empirical perspectives.

The rest of the paper is structured as follows. Section 2 reviews the related literature. Section 3 defines the variables included in the empirical analysis, lists the sources of the data and presents the proposed model. Section 4 presents and discusses the obtained results. Section 5 is the conclusion.

Literature review

As an integral part of the financial sector, insurance companies have always posed a challenge for researchers around the world, due to their significant implications on the economic, social, and political spheres. Profitability, as one of the key goals of every financial institution, is a constantly hot issue, addressed by numerous studies. However, the relationship of the firm–specific factors and profitability has recently enjoyed

increased interest among researchers. Several previous studies related to the determinants of the profitability of the non-life insurance companies were analyzed in order to observe the general trends in different countries and regions.

One of the first studies in this area analyzed the determinants of insurance companies' performance during the period 1986–1999 in the UK (Shiu, 2004). By empirically testing the economic and firm-specific variables, the author found that liquidity, unexpected inflation, interest rate levels, and core business profits were statistically significant determinants of insurance performance in the UK, revealing a positive correlation with interest rates, return on equity, solvency margins and liquidity, as well as a negative correlation with inflation and reinsurance dependence.

Using data from 1993 to 1997, Adams and Buckle (2003) conducted an empirical analysis of the determinants of the financial performance of the insurance companies in Bermuda. The findings indicate positive financial performance for companies with high leverage and low liquidity. Also, the financial performance positively correlates with the underwriting risk, while the size and scope of the company's operations are not significantly correlated to the financial performance. These researchers are among the few who have found a positive impact of underwriting risk on profitability.

A study conducted by Lee (2014) focuses on firm – specific factors and macroeconomic indicators that affect the profitability of Taiwanese non – life insurance companies. In this study, the panel data are analyzed over the period from 1999 to 2009, and profitability is measured by operating profit margin and ROA. According to the empirical results, the low loss ratio, the low use of reinsurance, the low expense ratio, and the positive return on investment have a positive effect on the profitability. Out of the macroeconomic variables, only the rate of economic growth has a significant impact on the operating profit margin. Market share has a negative effect on the operating profit margin, and financial leverage is reflected in the lower market value of the company, thus being significantly and negatively correlated with ROA.

Research on this topic has been conducted among the countries of the region, and their findings are largely consistent. The study by Pervan et al., (2013) conducted on the Macedonian non – life insurance market in the period 2002–2011 included both firm – specific and macroeconomic factors as determinants of insurers' performance. According to their findings, the expense ratio, the loss ratio, the economic growth, and the inflation play a major role in determining the profitability of the Macedonian non – life insurance sector. Analysis of the Serbian non – life insurance companies in the period from 2006 to 2013 indicates a significant and negative impact on the financial leverage, the retention rate, and the combined ratio on the

profitability as measured by the return on assets, while the influence of the premium growth rate, return on investment and company size is significant and positive (Kočović et al., 2014). Covering the Serbian non-life insurance sector from 2010 to 2015, Pjanic et al. (2018) examined the influence of the firm - specific factors: the company's size, the asset growth, the premium growth, the liquidity ratio, the debt ratio, the underwriting risk measured by the premium to surplus ratio, operating costs, financial leverage, and total revenues on the profitability. They have found that the increase in the premiums, the debt ratio, the operating costs and the share of the profit in total revenues have the greatest impact on the profitability in non - life insurance companies, measured by ROA. The experience from Croatia, on the other hand, indicates an existence of a dynamic insurance market, with potential for greater development. According to the study conducted in the period from 2003 to 2009 which covers insurance - specific, industry - specific and macroeconomic variables; the ownership, the expense ratio, and the inflation were found to have a negative and significant influence on the profitability, while past performance has a positive and a significant impact on the profitability measured by ROA (Pervan and Pavić Kramarić, 2010). Covering the same period, another research was conducted on the Croatian insurance market, where in addition to the factors from the internal environment, external economic factors from the wider environment were analyzed as well. The results showed a significant impact of company size, underwriting risk, inflation, and return on equity on profitability (Ćurak et al., 2011). A similar approach to the analysis of the internal and external environment was applied by Kozak (2011), who analyzed the influence of the macroeconomic and microeconomic variables on the profitability and cost efficiency of the non - life insurance companies in Poland during the process of integration into the European Union between 2002 and 2009. This period was characterized by an increase in the number of companies controlled by foreign investors, which has led to an increase in the gross written premium and accordingly, an increase in profitability. Besides, GDP growth and the market share of foreign - owned companies have a positive effect, while higher operating costs and the share of motor insurance in the company's portfolio have a negative effect on the financial performance on the non - life insurance companies.

The empirical findings of a panel data study on 198 non - life insurance companies in nine EU countries for the years 2004-2012 suggest that profitability is negatively affected by the size of the assets, underwriting activity measured by the combined ratio, and by strategic choices such as internationalization (when the shareholders are foreign companies or groups) and diversification (mixed companies operating in non - life and life insurance), while being positively affected by the volume of the reserves and the asset turnover. Regarding the macroeconomic variables, there is an inverse

relationship between profitability and the growth rate of the insurance market, which may be due to increased competition (Moro and Anderloni, 2014). According to the authors, the three main areas that constitute core insurance activity: insurance, financial and reinsurance activities strongly influence the profitability, although the impact of the reinsurance is neither negative, nor positive.

Malik (2011) explored firm-specific factors on a sample of 34 insurance companies in Pakistan for the period 2005–2009. According to the obtained results, the volume of capital, and the size of the company are positively and significantly related to profitability, whereas a significant but inverse relation was observed between both the loss ratio and the leverage ratio with the profitability.

Burca and Batrîncea (2014) examined the factors influencing the financial operations of 21 insurance companies on the Romanian insurance market during the time period 2008–2012 within the panel model with fixed effects. The determinants that positively affect the financial performance of non – life insurance companies in Romania are the size of the company, the retention rate, and the solvency margin, whereas financial leverage, premium growth, and loss ratio have a negative impact on the profitability measured by ROA.

The main results of the study of the key determinants of the profitability of non – life insurance companies in Turkey in the period from 2006 to 2013 show a positive correlation between the profitability and premium growth rate and a negative correlation with the age of the company, the loss ratio, and the current ratio. The results of the study have several implications: larger non–life insurance companies are more profitable compared to smaller ones, low risk of insurance leads to higher profitability, and lower liquidity implies better financial results (Kaya, 2015).

In the study conducted on nine insurance companies in the period from 2005 to 2009 in Ethiopia, Mehari and Aemiro (2013) found that leverage, besides the size of the company, has a significant and positive impact on profitability, while the loss ratio is statistically significant and negatively correlated with ROA. Tegegn et al., (2020) have recently conducted a study in the Ethiopian insurance market for the period between 2005 and 2016, and have examined the effects of firm-specific factors on profitability with ROA as a proxy. The authors developed random effects model for panel data analysis, and identified a positive relationship between premium growth rate and size and profitability.

Methodology and model specification

This study covers a period of eight years between 2012 and 2019, and the sample is comprised of all 11 non – life insurance companies operating in

North Macedonia. Annual data were used in the study, obtained from secondary data resources: the annual financial statements and accompanying notes as well as the annual reports of the Insurance Supervision Agency. Although the Macedonian insurance market has faced turbulences during the observed years, when several acquisitions took place, panel data analysis proved to be the preferred method for performing the analysis. Namely, during the observed period, the total of 11 non-life insurance companies operated on the market, and despite the several acquisitions, and changes in ownership structures, the business, assets, and liabilities of the acquired companies continued unaffected by the transactions.

The performance analysis of the non – life insurance companies in North Macedonia was carried out using a set of firm – specific indicators, related to the capital adequacy, the asset quality, the reinsurance, the underwriting performance, and the risk, the reserves, and the leverage, as proposed by the IMF (2003) and OECD (2016). The analysis was proposed in this manner in absence of structured adopted regulation and risk management procedure, implemented at country level (such as Solvency II regulation framework in EU). The variables used in the analysis were selected and specified after a thorough examination of the relevant literature findings and previous empirical studies in the area, and in accordance with data availability. The dependent variable in this study is profitability, measured by ROA (return of assets). The eight independent variables used as determinants of the profitability of the non-life insurance companies that operate in North Macedonia are: size of the company, loss ratio, expense ratio, insurance leverage ratio, premium growth rate, motor insurance, premium retention ratio and insurance capacity. The variables alongside their measurement method are presented on Table 1.

Table 1. Dependent and independent variables

Notation	Variable	Measurement method
Y	Return on assets (ROA)	Profit after tax/total assets
X1	Size of the company	Natural log of total assets
X2	Loss ratio	Incurred claims/earned premium
X3	Expense ratio	Operating expenses/earned premium
X4	Insurance leverage ratio	Net technical reserves/equity
X5	Premium growth rate	$(\text{Premium}_t - \text{premium}_{t-1})/\text{premium}_{t-1}$
X6	Motor insurance	Motor premium/total premium of the company
X7	Premium retention ratio	Net earned premium/gross earned premium
X8	Insurance capacity	Net premiums/equity

Source: Authors' calculation

Financial performance is a universal indicator of the company's ability to generate profit and therefore serves as a measure of good business performance. The return on assets (ROA) was chosen as the proxy to measure

profitability performance. Return on assets is an indicator of how profitable the company is relative to its total assets and shows the management efficiency of utilizing the assets to generate earnings (Crosson et al., 2008). The majority of authors within the framework presented in the Literature review used ROA in analyzing the profitability of the non-life insurance companies. Although the companies are not immune to changes that affect the entire insurance market, the fluctuations observed between insurance companies are mainly due to the internal changes and conditions, i.e. firm – specific factors (Malik, 2011). Therefore, determining those factors and their relationships with profitability is of great importance to the business. The selection of the independent variables was made taking into account the available data, as well as the relevant literature and theoretical knowledge.

Size of the company is measured by the natural logarithm of the total assets in order to eliminate the extreme values in the data. Many authors have used this parameter in their analysis, although their findings are not consistent (Adams and Buckle, 2003; Shiu, 2004; Ćurak et al. 2011; Malik, 2011; Mehari and Aemiro, 2013; Kočović et al., 2014; Lee, 2014; Burca and Batrîncă, 2014; Kaya, 2015; Pjanic et al., 2018; Tegegn et al., 2020). Major insurance companies are expected to respond quickly to the market changes and benefit from economies of scale (Shiu, 2004); however, they could also encounter inefficiency and ineffectiveness issues (Adams and Buckle, 2003). Having in mind the characteristics of the Macedonian insurance market, in this paper we propose a positive relationship between the size of the company and the profitability.

The *loss ratio*, also considered as a proxy for measuring underwriting risk shows the effective risk – taking in the insurance underwriting process and Adams and Buckle (2003); Malik (2011); Mehari and Aemiro (2013); Lee (2014); Burca and Batrîncă (2014); (Kaya, 2015) have also used it in their respective analysis. Undertaking excessive risk in order to increase the market position, may affect the stability of the company through accumulation of losses, further indicating that the costs paid for claims exceed the premiums earned. In this study the loss ratio is calculated by dividing the incurred claims with the earned premium and its expected influence on the profitability is negative.

The loss ratio is often combined with the *expense ratio*, calculated as the ratio of the sum of the operating expenses (acquisition cost, administrative costs and other technical charges) to the earned insurance premiums. Basically, the expense ratio compares the expenses incurred when underwriting a policy (the costs of acquiring, writing and servicing insurance) with the revenues expected from it. The lower the expense ratio, the more premiums are earned in comparison with the expenses paid in generating or supporting the premiums, hence the inverse relationship between expense ratio

and profitability is expected. Other authors have used this indicator in their analysis as well (Pervan and Pavić Kramarić, 2010; Pervan et al., 2013; Lee, 2014).

The *insurance leverage ratio* is defined as reserves to equity and pose as an indicator of potential solvency issues. The amount of reserves should be carefully estimated to cover the potential liabilities from claims made on the underwritten policies. This ratio is one of the indicators used for analyzing the company's ability to meet and fulfill its financial obligations. Should the reserves be inadequately estimated, the insurer will be more reliant on policyholder surplus to cover the potential liabilities, and thus a greater risk of becoming insolvent emerges. Therefore, it is expected that the insurance leverage ratio will have negative effect on the profitability. Similar measure was used by Adams and Buckle (2003); Shiu (2004); Malik (2011); Burca and Batrîncă (2014); Kočović et al. (2014); Kaya (2015).

Gross written premium is the main source of income for the insurance companies, which they earn from the basic insurance activity. The increase in the *premium growth rate* indicates both growth of the company and increase of the market share. However, in this process special attention should be paid on the underwriting process: risk assessment, risk selection, and pricing. Being excessively dedicated to increasing the market share, and to obtaining premium growth, may lead to negligence of the other important targets, such as solvency (Chen and Wong, 2004). Nevertheless, it is expected that the premium growth indicator will positively affect the profitability. Similar indicator was used by Mehari and Aemiro (2013); Burca and Batrîncă (2014); Lee (2014); Kočović et al. (2014); Kaya, (2015); Pjanic et al. (2018); Tegegn et al. (2020) within the scope of their analysis.

Since the growth of the insurance market depends largely on the habits and attitudes of the people, it should be noted that on the Macedonian insurance market, the majority of people buy only the compulsory insurance for bodily injury or property damage caused by any event related to a car accident against third parties, regulated by law in North Macedonia. Therefore, even though the premium from motor insurance is guaranteed and fixed, determined by state laws, it is followed by high and frequent losses. Hence, a reverse relationship between the high *share of motor insurance premium* in the total premium and the profitability is expected. This indicator was used in the profitability analysis of Kozak (2011) and Kaya (2015).

Each insurance company transfers part of that risk to another insurance company in a process called reinsurance, in exchange for a premium, in order to hedge against risk, provide stability and increase its risk – taking capacity. This imposes the need to determine an appropriate level of *retention*, i.e. to what extent will the risks be retained in the company's own capacity, in order to reduce the risk of insolvency in the event of major, catastrophic damage

(Shiu, 2004). The excess of risk is transferred to reinsurance with the goal to reduce the uncertainty of the frequency and magnitude of future losses, allowing insurance companies to hedge against potential economic shocks (Adams, 1996). The retention rate is included in this analysis because it reveals the risk – taking strategy. It is expected that the higher retention rate will positively affect the profitability. This indicator is often employed in other studies in the area of insurance (Lee, 2014; Kočović et al., 2014; Moro and Anderloni, 2014; Burca and Batrîna, 2014; Kaya, 2015).

Premium to surplus ratio is net premiums written, divided by policyholder surplus, which is the difference between the assets and liabilities of the non–life insurance company. This ratio indicates the capacity of an insurance company to underwrite new policies. The gap between the assets and the liabilities may be increased by effective risk management in the process of underwriting new policies: reducing losses and investing premiums. It is expected the higher premium to surplus ratio to be negatively associated with profitability. On the other hand, a low premium to surplus ratio is considered a sign of financial strength because the insurer possesses a larger capacity to write more policies. This indicator was also used by Pjanic et al. (2018) in their analysis.

The data of 11 non – life insurance companies operating on the Macedonian insurance market in the period between 2012 and 2019 were brought together to obtain 88 observed panel data sets. Since the data have both the cross–sectional and time–series dimensions, a panel data model was developed (Wooldridge, 2010). In this study, eight – year data exist for all cross – section units, therefore, the panel is balanced. The general form of a panel data regression model can be shown with this equation (Baltagi, 2005):

$$Y_{it} = \alpha + X'_{it}\beta + u_{it}, i = 1, \dots, N; t = 1, \dots, T \quad (1)$$

where i denotes the cross – section dimension, and t denotes the time dimension; Y is the dependent variable; X is the explanatory (independent) variable; β is the regression coefficient of explanatory variable; α is the intercept; and u is the error term.

Having in mind the specific model of this paper, the equation (1) can be translated into the following form:

$$ROA_{it} = \alpha_i + \beta_1 SIZE_{it} + \beta_2 LOSSRATIO_{it} + \beta_3 EXPENSERATIO_{it} + \beta_4 LEVERAGE_{it} + \beta_5 PREMIUMGROWTH_{it} + \beta_6 MOTOR_{it} + \beta_7 RETENTION_{it} + \beta_8 CAPACITY_{it} + u_{it}$$

where i is the index of non – life insurance companies; t is the index of time periods (years); β_k is the regression coefficient to be estimated (k is the index of explanatory variables and $k = 1, 2, 3, \dots, 8$) for each of the variables respectively. Based on the assumptions from the available observations, the widely used models in panel data analysis are: the pooled regression model, the fixed effects model, and the random effects model. The choice of the panel model specification is determined by the appropriate statistical tests. However,

according to Wooldridge (2010), pooled OLS is employed when different sample is selected for each period of the panel data. In this paper, the same sample was observed through all periods, therefore fixed effects or random effects model are recommended. Based on the Hausman specification test results, the random effects model appeared to be mo appropriate model for this study than the fixed effects model, as the Chi-squared value is 12.3397 and the p-value is 0.1367. Furthermore, the Breusch – Pagan test ($p = 0.1494$) indicates the presence of homoscedasticity in the model, meaning the variance of the residual, or error term in the model is constant which suggests a level of consistency.

Results and discussion

The descriptive statistics for each of the predefined variables included in the panel set are presented in Table 2. The profitability indicator, ROA, ranges between -30.1% and 9.7%, with average value of 0.4%. This result might indirectly suggest the key problem in the Macedonian insurance sector: insufficient pricing in order to increase or maintain market share, given the increased market competition.

Table 2. Descriptive statistics of variables

	Mean	Median	Min.	Max.	Std. Dev.
ROA	0.004	0.016	-0.301	0.097	0.065
Size	20.786	20.859	19.925	21.63	0.517
Retention	0.83	0.877	0.451	0.976	0.137
Motor insurance	0.581	0.612	0.261	0.888	0.173
Loss ratio	0.473	0.465	0.328	0.731	0.079
Leverage	2.429	1.991	0.253	6.227	1.481
Premium growth	0.055	0.041	-0.122	0.52	0.107
Expense ratio	0.587	0.565	0.381	0.95	0.123
Capacity	2.326	2.028	0.297	6.037	1.405

Source: Authors' calculation

In order to test if there is a potential for the multicollinearity of explanatory variables, the matrix of Pearson's correlation coefficients was calculated before the panel model design. Correlation coefficient values vary between -1 (perfect negative correlation) and 1 (perfect positive correlation). Since none of the computed correlation coefficients in Table 3 is greater than 0.7 it can be concluded that a high correlation between selected explanatory variables does not exist.

Table 3. The matrix of Person’s correlation coefficients

	ROA	Size	Retention	Motor insurance	Loss ratio	Leverage	Premium growth	Expense ratio	Capacity
ROA	1.000	0.470	-0.308	-0.368	-0.554	0.258	-0.209	-0.129	0.264
Size		1.000	-0.481	-0.434	-0.185	0.431	-0.141	0.145	0.425
Retention			1.000	0.445	0.205	0.089	-0.013	-0.524	0.088
Motor insurance				1.000	0.174	-0.246	0.094	-0.057	-0.298
Loss ratio					1.000	0.153	0.204	-0.105	0.125
Leverage						1.000	-0.114	-0.474	0.583
Premium growth							1.000	0.093	-0.111
Expense ratio								1.000	-0.502
Capacity									1.000

Source: Authors’ calculation

According to the results obtained from the regression analysis, presented in Table 4, 66.3% of the variance in the dependent variable (ROA) can be explained by the independent variables, meaning that the data fit the regression model, measured by the R-Squared indicator (coefficient of determination). The estimated model with random effects on the panel data reveal negative and significant influence of the loss ratio, the expense ratio, and the retention rate on the profitability at a statistically significant level of 1%. According to the results, negative relationship between premium to surplus ratio (capacity), and profitability is determined at a statistically significant level of 5%. On the other hand, there is a positive effect of the size of the company on the profitability measured with ROA, at a statistically significant level of 10%. The other variables’ influence is not taken into consideration, due to the lack of statistical significance at any of the observed levels.

Table 4. The results of random effects model

Constant	-0.4723 (0.479)
Size	0.0424* (0.022)
Retention	-0.1174*** (0.042)
Motor insurance	0.0427 (0.059)
Loss ratio	-0.5137*** (0.059)
Leverage	0.0204 (0.020)
Premium growth	-0.0028 (0.040)

Expense ratio	-0.1714*** (0.051)
Capacity	-0.0169** (0.021)
R – Squared	0.663
Adj. R – Squared	0.614
F – statistic	18.309
Prob (F – statistic)	0.000
Observations	88

Standard errors are reported in parentheses. *, **, *** indicates significance at the 90%, 95% and 99% level, respectively.

Source: Authors' calculation

The estimated values of the coefficients in the model suggest that the loss ratio, the expense ratio, the retention rate, and the premium to surplus ratio negatively affect the profitability of the non-life insurance companies in North Macedonia, whereas the influence of the size of the companies is positive.

The inverse relationship between the *loss ratio (technical result)*, and profitability indicates that the companies with higher technical result are less profitable. This result is also in line with the findings of Malik (2011), Mehari and Aemiro (2013), Pervan et al., (2013), Burca and Batrîncă (2014), Lee (2014), Kaya (2015), but contrary to the result of Adams and Buckle (2003) who concluded that companies that are less risk averse in the insurance acceptance process have better financial results. The higher loss ratio indicates that the premium income is not sufficient to cover the claims' expenses. This indicator can be implicitly correlated with the company's experience in providing a business quality and risk management. High loss ratio might be obtained when the insurer underestimates its clients' risk profiles, in an event of a natural disaster when the frequency of the claims is increased and when the operations are inefficient. Therefore, management should pay special attention to identifying, analyzing and quantifying this risk, and developing systems for its prevention, reduction, avoidance, and control. Insurance companies estimate the capacity in which they retain the risk on their own, and transfer the excess of risk to reinsurance. Those activities would provide greater protection and would ensure the stability of the earned premium, in order to mitigate the impact of the unexpected loss events.

The rationale for the negative influence of the *expense ratio* on the profitability is similar, given that both the loss ratio, and the expense ratio show the operational efficiency of the companies in performing their core business. Provided that these indicators are high, the key operative activities of the company may be regarded as less successful. Nevertheless, unless the expenditures for operational costs are followed by increase in the premium income, the performance of the management would be considered as poor; thereby negatively affecting the profitability. The findings are consistent with

the findings of Pervan and Pavić Kramarić (2010); Pervan et al. (2013) and Lee (2014).

Reinsurance is considered among the most important activities of the insurance companies since it provides risk coverage and protection against catastrophic risks and large losses for the insurance companies, thus increasing their capacity, in exchange for a reinsurance premium. The retention ratio, as calculated in this paper, indicates that the company manages its own estimated risk without largely relying on reinsurance. The high *retention* rate reveal little gap between gross and net premium income, which contributes to higher profitability. However, this negative relationship between retention rate and ROA indicates lower dependence of the Macedonian non-life insurance companies on reinsurance and retaining the risks in their own coverage. Although, on one hand the reinsurance costs are low and adequate savings are achieved, the insurance companies are exposed to risks in relatively greater extent which would in turn harm the profitability (Shiu, 2004). The obtained result did not support the proposed hypothesis although it was in line with the findings of Lee (2014) and Kocovic et al. (2014), but in opposition to the results of Burca and Batrîncea (2014).

A *premium to surplus ratio* is a measure of the financial strength of the insurance company, where *surplus* is the difference between the insurer's assets and liabilities. When premiums increase without a corresponding increase in policyholders' surplus, the capacity of the insurer to write new policies is decreasing, therefore the higher the ratio, the lower the capacity to write more policies. The excess of assets over liabilities refers to a higher capacity to underwrite new policies. If that is the case, the insurer should effectively manage the risks, by reducing losses from claims (therefore reducing the liabilities), and investing the premiums to achieve a return (therefore increasing the assets). In the obtained results of Pjanic et al. (2018) this indicator has not been statistically significant in the analysis.

Despite the inverse relationships between the aforementioned independent variables, and the dependent variable, the company's *size* positively affects the profitability. This relationship is understandable since the increase in the total assets is a significant factor affecting the profitability, measured by ROA. Larger companies realize the effects of economies of scale and better cost efficiency based on the control of the distribution channels, among other available capacities which enable them to cope better with the market conditions, as well as to achieve the effects of risk diversification (Kocovic et al., 2014). As a result, insurance companies operating in Macedonian non-life sector manage to successfully avoid bureaucracy, and to position themselves better in the market, thus enjoying higher benefits. The results are in line with the findings of Malik (2011), Ćurak et al. (2011),

Mehari and Aemiro (2013), Burca and Batrinca (2014), Kaya (2015), Tegegn et al. (2020).

All things considered, managers in this dynamic, and turbulent environment face immense challenges to achieve positive financial results while at the same time maintaining the solvency. Although the aspiration of the insurance companies for a higher market position is clear, we must not forget that the increase in the volume of business activity is accompanied by an increase in liabilities to insurers; therefore it is necessary to allocate a relatively higher amount of technical reserves. If the premium growth is too aggressive, the insurance company is exposed to risks to the extent that they exceed the available technical and financial capacity, which may be one of the key reasons for its insolvency. Based on the obtained results from the analysis, and in order to achieve higher profitability, several implications for the managers arise. Managers should closely monitor the loss ratio, expense ratio and retention rate in terms of net premium income. Therefore, proper risk management mechanisms should be employed in order to produce an effective amount of premium income. Furthermore, an early warning system and holistic strategic management framework should be implemented.

Each company within the Macedonian insurance sector is striving towards greater profitability and at the same time faces the challenge to provide a sustainable competitive advantage over the other companies on the market. In order to achieving those strategic goals, a long term series of actions should be designed and implemented in terms of improving communication channels, operating systems, distribution channels, and managerial capacities and capabilities. The development of the growth strategies should be based on improved operations and should be oriented toward reducing the complexity, seeking new insights to create information advantage and transforming core operations to improve operational effectiveness. Among the changes the insurers face with major impact on their strategies are the changing customer behavior and new technologies that have to be adopted in order to keep track of the changing market conditions. Although the insurance sector is fairly traditional, the classical organization – centric, product driven model should be shifted towards customer – centric approach. Consequently, the insurers must understand customer behavior in order to provide tailored solutions to satisfy their needs and demands. Furthermore, the insurance companies should ensure accessibility of their services to customers and increase customer interaction. Taking this into consideration, the insurance services should be redefined; the insurance companies should be more flexible and manage the risks proactively. Nevertheless, the insurance companies should embrace the opportunities by defining unique capabilities to differentiate themselves from competitors, develop new products, distribution canals and methods. The success in achieving profitable growth amid economic, financial, and

regulatory change is different for each company, depending on its unique characteristics and factors.

Conclusion

Non – life insurance companies in the Republic of North Macedonia operate in a small market, still developing and lagging behind European countries. Estimated results in suggested random effects model obtained from 11 non – life insurance companies in the period between 2012 and 2019 show statistically significant negative influence of the loss ratio, the expense ratio, the retention rate, and the premium to surplus ratio on the profitability as measured by the return on assets (ROA), whereas the size of the company positively affects the profitability of non – life insurers in North Macedonia.

The results of the study have several strategic implications for the managers in the Macedonian non – life insurance companies. First, the results indicate the necessity of identifying, analyzing, and quantifying the risks and developing systems to prevent, reduce, avoid or control them. This is especially important for the underwriting risk, as it is within the managerial control and influence. Second, the increase in market share and consequently the volume of business activity is accompanied by an increase in the company's liabilities to the insured. Therefore, it is required that the companies adequately estimate the level of technical reserves and operate within their capacity in order to prevent insolvency. Third, the company should set appropriate authorizations for employees, record and track the results of each individual client, set acquisition limits and procedures for approving transactions that involve new products or transactions that exceed the risk limits.

The dynamic environment, the advancement of the technology, globalization and financial innovation impose the need for proactive risk management. However, the insufficient readiness of Macedonian insurance companies to anticipate risks, and the absence of quantitative assessment and management techniques is one of the main problems of the Macedonian insurance sector. Therefore, in order to strengthen the stability of the insurance sector, the introduction of the EU Solvency II Directive is necessary, which would contribute to strengthening the capital positions and introducing risk-based capital requirements, as well as enhancing risk management and transparency of the insurance companies. The holistic risk – management framework which will eventually lead to better financial performance should be incorporated into the business activities and aligned with the corporate culture and the strategic goals. However, the adoption of the Solvency II framework will be a great challenge, especially for the companies that have weak management system and lack quantitative risk monitoring.

In general, although every company in the insurance sector strives towards achieving higher profitability, many challenges arise along the way. First, the insurance sector faces a major challenge in acquiring new customers and retaining existing ones, mainly due to an increased competition in the last several years. Another challenge is the struggle to provide innovative insurance products and distribute them efficiently. Third challenge is the low public awareness of risks and the need for insurance alongside the low financial literacy. Fourth challenge is the insufficient trust in insurance companies due to delay in the process of payment of claims and fifth challenge is the unfair competition expressed through violation of existing tariffs of the insurance premium in order to artificially boost market share. However, with regards to their policyholders, the insurers should be more transparent in explaining and disclosing the insurance conditions and contribute to educating clients about insurance benefits, because a large part of the population considers insurance as an unnecessary expense.

On the positive side, the large number of policies concluded in 2019 is an indication that the public is becoming more aware of the need of securing its financial future in various ways. This means that despite the progress in the insurance, there is still room for stimulation of larger use of the benefits from the non-mandatory classes of insurance. However, in this process, much attention should be paid to ensuring sustainable profitable growth through prudent underwriting strategies, strict selection criteria, rational pricing policies, effective cost control for claims, and cost optimization.

References:

1. Adams, M. (1996). The reinsurance decision in life insurance firms: An empirical test of the risk-bearing hypothesis, *Accounting & Finance*, 36(1), 15–30.
2. Adams, M. and Buckle, M. (2010). The determinants of corporate financial performance in the Bermuda insurance market, *Applied Financial Economics*, 3(2), 133–143.
3. Baltagi, B.H. (2005). *Econometric Analysis of Panel Data*, 3rd Ed.; John Wiley & Sons Ltd., Chichester, UK
4. Burca, A. M. and Batrinca, G. (2014). The determinants of financial performance in the Romanian insurance market, *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1), 299–308.
5. Chen, R. and Wong, K. A. (2004), The determinants of financial health of Asian insurance companies, *The Journal of Risk and Insurance*, 71(3), 469–499.
6. Crosson, S. V., Needles, B. E. and Powers, M. (2008). *Principles of accounting*, 10th ed., Boston, MA: Houghton Mifflin.

7. Ćurak, M., Pepur, S. and Poposki, K. (2011). Firm and economic factors and performance: Croatian composite insurers, *The Business Review Cambridge*, 19(1), 136–142.
8. Das, M. U. S., Podpiera, R., Davies, N. (2003). Insurance and issues in financial soundness, IMF Working Paper 03/138, International Monetary Fund, Washington, DC.
9. Haiss, P. and Sümegi, K. (2008). The relationship between insurance and economic growth in Europe: A theoretical and empirical analysis, *Empirica*, 35(4), 405–431.
10. Kaya, E. O. (2015). The effects of firm-specific factors on the profitability of non - life insurance companies in Turkey, *International Journal of Financial Studies*, 3(4), 510–529.
11. Kočović, J., Paunović, B. and Jovović, M. (2014). Determinants of business performance of non–life insurance companies in Serbia, *Ekonomika preduzeća*, 62(7–8), 367– 381.
12. Kozak, S. (2011). Determinants of profitability of non - life insurance companies in Poland during integration with the European financial system, *Electronic Journal of Polish Agricultural Universities*, 14(1), 20–25.
13. Kwon, J. W. and Wolfrom, L. (2016). Analytical tools for the insurance market and macro-prudential surveillance, *OECD Journal Financial Market Trends*, 1, 1–47.
14. Lee, C.Y. (2014). The effects of firm specific factors and macroeconomics on profitability of property–liability insurance industry in Taiwan, *Asian Economic and Financial Review*, 4(5), 681–691.
15. Malik, H. (2011). Determinants of insurance companies profitability: An analysis of insurance sector of Pakistan, *Academic Research International*, 1(3), 315–321.
16. Mehari, D. and Aemiro, T. (2013). Firm-specific factors that determine insurance companies’ performance in Ethiopia, *European Scientific Journal*, 9(10), 245– 255.
17. Moro, O. and Anderloni, L. (2014). Non - life insurance economic performance - an empirical investigation, *Journal of Economics & Management, University of Economics in Katowice*, 18, 159–177.
18. National Bank of the Republic of North Macedonia (2020). Financial stability report for the Republic of North Macedonia in 2019, available at https://www.nbrm.mk/content/Regulativa/%D0%A4%D0%A1%D0%A0_2019%202.pdf (accessed 10.03.2021)

19. Pervan, M. and Pavić Kramarić, T. (2010). Determinants of insurance companies' profitability in Croatia, *The Business Review*, Cambridge, 16(1), pp. 231–238.
20. Pervan, M., Poposki, K. and Čurak, M. (2013). How Well Insurance Companies in Macedonia Perform? Recent researches in applied economics and management, *Proceedings of the 5th WSEAS International Conference on Applied Economics, Business and Development*, 457–463
21. Pjanić, M., Milenković, N., Kalaš, B. and Mirović, V. (2018). Profitability determinants of non - life insurance companies in Serbia, *Ekonomika Preduzeća*, 66(5–6), 333–345.
22. Shiu, Y. (2004). Determinants of United Kingdom general insurance company performance, *British Actuarial Journal*, 10(5), 1079–1110.
23. Tegegn, M., Sera, L and Merra, T. M (2020). Factors affecting profitability of insurance companies in Ethiopia: panel evidence, *International Journal of Commerce and Finance*, 6(1), 1–14
24. Wooldridge, J. M. (2010). *Econometric Analysis of Cross Section and Panel Data*. Cambridge, MA: MIT Press, Second Edition.



ESJ Social Sciences

Albania: Motivation Factors Among 15-Year-Old Students, Especially Disadvantaged Ones

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Abstract

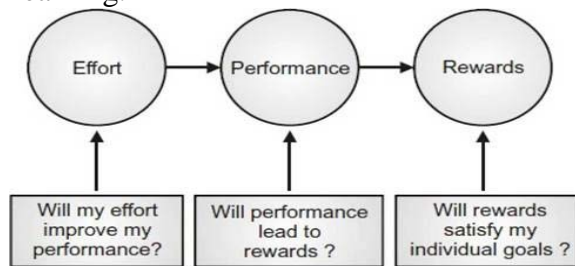
The importance of the study lies in the analysis of youth productivity and employment. From the data so far it is underlined that the potential of Albanian youth will be realized only for 56% if no measures are taken. Referring to the literature review, there is a division of scholars' attention towards vocational education and employment or secondary and higher education, without emphasizing the potential of basic education in guiding the student towards clarity. In other words, they do not stimulate students' motivation towards a certain profile. The article is based on mainly secondary data analysis. The purpose of this article seeks to verify some motivation factors among 15-year-old students, especially disadvantaged ones, for instance the attitude toward learning, access to books, and the reach of career guidance services in basic education schools in Albania. Some conclusions from the data analysis show that in the circumstances of youth unemployment, the motivation to perform better among 15-year-old students may be more related to seeing success and being more productive at work. Albanian students show little vision of their future careers, especially the most disadvantaged. Factors that can influence the growth of students' career goals can be: their attitude towards books and reading, school choice and access to career guidance services in schools in Albania.

Keywords: Attitudes, Lockdown, Quarantine, Isolation, COVID-19, Risk, Predictor

Context

Literature confirms the connection between the visions of tomorrow's world of work with the position of the student toward learning, starting from basic education. For instance, it is established that students learn better if they have a strong motive and clarity about their future and the path they want to undertake as adults. In order to measure learning, there is broad consensus that its strongest predictor is the very level of reading comprehension at 15 years old, which OECD measures every three years through the PISA international test.

There are several theories about learning motivation, but this article will focus on the expectancy model (P.H. HemaMalini, 2014), which connects efforts with expectations and the reward deriving from productive employment. This model has been used first for motivating workers, but then it expanded to motivation for learning.



Source 1. <https://positivepsychology.com/motivation-education/>

With regard to results on reading, the connection with three preconditions is verified and these are the social-economic background (consisting of parents' education, their employment, and the writing-reading home environment); school and the educational environment, as well as the student profile with the skills, efforts, and motivation (Cordula Artelt Jürgen Baumert Nele Julius-McElvany, 2003).

The 2013-2018 Government of Albania Program made young unemployment a priority to address. The vocational skills gap for young people was highlighted in itself as a cause for low productivity of individuals in Albania and a slowdown of growth in the private sector (National Strategy for Employment and Skills, 2014). In this context, it was documented that the socially most vulnerable groups were farther from access to specialized services, such as: students without basic education, Roma and Egyptian children, girls and particularly those who were victims of abuse and trafficking, as well as youth who did not have access to choosing vocational schools due to distance from services. Another factor was the gender stereotype about vocational work and education that kept girls away from such service and closer to work at home.

Meanwhile, a clearer employment perspective motivates children's learning at very young ages and improves their attitude toward school. However, this perspective is not clear for groups of disadvantaged¹ children. In Albania, only 4% of 15-year-old disadvantaged students who are PISA participants have a clear idea of what they want to become when they grow up, ranking last among the 78 countries that participated in the testing.² Furthermore, literature confirms a strong connection between students' access to learning and the achievement of student results, thus providing an indicator that is interdependent upon the choices the student will make in life. For instance, students who show greater interest in reading or those who are more capable of resolving difficult problems are more likely to perform better. Also, particularly strong connections appear between the tendency of students to control their learning consciously to monitor progress and their self-confidence. This suggests that effective learning may not be acquired simply as a skill, but it also depends greatly on the development of positive attitudes toward learning as a process (Cordula Artelt Jürgen Baumert Nele Julius-McElvany, 2003).

Another theory that connects learning with the perspective of productivity in adult life for any individual is that of human capital. This encompasses: "The skills, knowledge, and experience possessed by an individual or population, seen in connection with their value or cost for an organization or country" (Dictionary.com, 2021). Different theories are at use to define human capital. Human capital is also measured by the World Bank (Human Capital Project, 2021) and the United Nations Organization (Guide on Measuring Human Capital, 2016) in approximate manners, but the definition according to the World Economic Forum (World Economic Forum, 2017), has drawn attention because it defines the productivity of a person or society in its dynamics, without circumventing the factors that diminish such capital, such as unemployment or lack of productivity.

Albania's human resources index is evaluated at 58.2 by this measurement. The analysis of each component confirms achievement in the length of schooling (years of school and growing participation), but when it comes to effectiveness in educational attainment (math and functional reading), employment (number of youths at work) or complex and specialized skills, Albania ranks at particularly low and declining levels. This means that unless active and effective policies are undertaken, an Albanian child is expected to develop only 58 percent of its potential when he/she grows up.

¹ According to OECD, 25% of students with lower social-economic and cultural index are considered disadvantaged.

²<https://gpseducation.oecd.org/CountryProfile?plotter=h5&primaryCountry=ALB&treshold=5&topic=PI>

Thus, the conclusion may be drawn that a priority is not only the increase in the first dimension, which has to do with high school attendance indicators, but this capital should not be undone by lack of its use immediately after school. This may occur if access to the labor market is obstructed or attained vocational skills are not appropriate or compatible with labor market needs.

Methodology

The article is based on mainly secondary data analysis. The following reflects the purpose and objectives of the study and supports the selection of literature review and a cross-sectional analysis through secondary data, as well as the limitations of the study.

The *purpose* of this article seeks to verify some motivation factors among 15-year-old students, especially disadvantaged ones, for instance the attitude toward learning, access to books, and the reach of career guidance services in basic education schools in Albania.

First objective of the article, offer a review of the literature will abstract a conceptual framework of factors that affect the motivation of 15-year-old students for learning and the future of their careers.

Second objective, the analysis of secondary data (source INSTAT) will give us a description of the progress of youth employment for the years 2014-2020, seen from the aspects of demographic change.

Third objective, cross-sectional analysis through data collected from OECD standardized questionnaires in the PISA 2018 test. The indicators are as follows:

- a) Students' access to learning and books;
- b) School selection;
- c) Efficiency of career guidance services in 9-year schools.

The article aims to draw on existing data to analyze some elements that are directly related to students' aspirations and motivation, as well as the role of schools or employment services in this field. To get a more complete picture, the article will use data collected through the OECD during the PISA 2018 test. Regarding the sample size: Albania is represented in the PISA 2018 program by 327 schools and 6,359 students.

Figure 1 (presents a conceptual model of the factors that influence student motivation. It includes different factors in this model, but the focus will be only on the factors of access to learning and career guidance services among 15-year-olds).



Figure 1. Schematic presentation of factors linked with motivation of 15-year-old students in Albania, 2018

Population and sampling

The target population consists of 15-year-old students who have been selected to be inclusive in terms of sex, place of residence, social-economic status, etc., aiming at the 9th and 10th grades, and plans to include full-time as well as part-time students, and even students who attend vocational programs or other similar programs, foreign students who attended foreign schools in their own countries, as well as foreign students who attend relevant education in Albania. The entire information used and analyzed in this research has been obtained from questionnaires prepared for different target groups that include: questionnaires for students, teachers of Albanian, and school administrators referring to the database created by PISA 2018.³ The article has processed only the data on the students. PISA was created and developed as a program by the Organization for Economic Cooperation and Development (OECD) at the end of the 1990s as continued, international comparative study, which collects mainly the indicators of student characteristics and skills. PISA also collects contextual data that allows these results to be interpreted in terms of their broader contexts. Data from PISA are of interest to academia, researchers, and other partners in education.⁴

Sample of students

With regard to the sample of students,⁵ the sample selected for Albania consists of 6,359 students of the 15-year old age group from a population of

³ <https://www.oecd.org/pisa/data/2018database/>

⁴ CY7_1703_GEN_NPMMannual_FULL_1.docx 8

⁵ https://www.oecd.org/pisa/data/2018database/CY7_201710_QST_MS_STQ_NoNotes_final.pdf

30,160 students (15-year old students enrolled in schools).⁶ A series of components were taken into consideration while selecting the students, such as: sex, class, type of school, etc. Their division is as follows:

The questionnaire of students focuses mainly on:

- The student, his/her family, and home;
- Language learning at school;
- Views on reading;
- What the student thinks about life;
- About school;
- School hours and time spent on learning.

The limitations of the research stem from the fact that the collected information is based on self-reporting, which may often contain doses of subjectivity. Another limitation has to do with the statistics on employment in villages, which underestimate the phenomenon because they consider villages as entirely employed in agriculture. Nevertheless, information is very valuable and the sampling is credible.

Findings

Dynamics of the political and institutional framework of laws and employment policies

In keeping with the vision of the European Union “Europa 2020” and accession requirements for Albania to this body, Albania focused on employment relying on enabling our workforce and guiding it toward the needs of the labor market (<https://www.cedefop.europa.eu>, n.d.). This political action sought to considerably improve the system of services for jobseekers and to bring the vocational education system closer to these services.⁷ The goal was to achieve this through forming a unified system of employment services based on best European practices. Vocational training and employment were seen as limbs of the same body, seeking the connection between the two, with dual education being the leading word. The reform was accompanied by legal reforms, amending and improving the Labor Code,⁸ so that it would allow for room for paid internships for young people, which were not even mentioned in this Code in the past. Beside the Code, the entire Law on Vocational Education was redone in order to allow for the transformation of vocational high schools into multi-disciplinary lifelong training centers, and

⁶ Table 11.1, Population characteristics, sample characteristics, exclusions and coverage indices for countries/economies, <https://www.oecd.org/pisa/data/pisa2018technicalreport/>

⁷ Act no. 63/2014 on some amendments to law no. 8872, dated 29.3.2002, “on vocational education and training in the republic of albania,” amended

⁸ Act no. 7961, dated 12.7.1995, labor code of the republic of albania (amended by laws: no. 8085, dated 13.3.1996; no. 9125, dated 29.7.2003; no. 10 053, dated 29.12.2008; no. 136/2015, dated 5.12.2015)

create opportunities for founding higher vocational schools⁹. The higher education law contained provisions for a more complete implementation of the National Qualification Framework¹⁰ and the National List of Occupations,¹¹ and with them, a package of by-laws was drafted that articulated this reform at the institutional level. Investments accompanied the essential changes of transforming employment offices and employment programs,¹² which targeted particularly underemployed groups such as women and young people.

In the process, another goal emerged for strengthening ties between learning and facilitating the transition to jobs. To that end, vocational education and training services were seen as closely linked together with the final goal being employment. The interconnection between school curricula with well-organized practice or internships in the workplace, using elements of the German dual system approach, gave the opportunity for vocational education to those young people who were neither at school nor at work and who, according to the living standard measurement by INSTAT in 2012, were at an alarming level of 30 percent in 2013.

The other benefit was seen in coordination with the private sector, which is also the provider of jobs. Thus, in every vocational school, entrepreneurs of the relevant areas were invited to assume leadership positions in the boards. Such instances were notices for instance in the Construction school, whereby a leading construction company assumed leadership of the board, or the tourism school, where another company from this sector assumed leadership, etc. A new vocational school was also created with the help of donors in the field of ICT.

Groups at risk of exclusion from the labor market

As in every country, student achievement in Albania depends directly from the social-economic status of parents, their geographic location, sex, and social-cultural affiliation, e.g. minorities. These have a direct impact on school results as well as the opportunities of individuals for employment and self-realization.

Both of these groups have lower educational results. The very gap of results between villages and the cities is by 38 points according to PISA 2018 (achievements of one year), while the one between lower and higher social-

⁹ for the first time, The Higher Education Act defined provision of higher vocational education

¹⁰ Act no. 23/2018 on some amendments and additions to law no, 10 247, dated 4.3.2010, "on the albanian framework of qualifications"

¹¹ Council of Ministers Decision no. 514, dated 20.09.2017 on the approval of the national list of occupations (nlp)

¹² Council of Ministers decisions on Employment Programs

economic groups is 60 points (achievements of two years). With regard to regions, the article finds that educational results are lower in the north, then the south, and then the middle of the country.

Nevertheless, the average results of disadvantaged groups and those in the villages suggest such poor results that they do not ensure access to higher education and, therefore, to employment with satisfactory salaries, suggesting even lower motivation among these groups. Meanwhile, an opinion survey organized by Friedrich Ebert in Albania suggests that 82% of youth point to the salary as the leading motivation for their employment.

Inhabitants of rural areas (30% declared as such) have limited access to employment and vocational education and training services due to distance from specialized services, but also due to the nature of their activity, which is often a closed economy working mostly to fulfill survival needs and not participating actively in the market. Although the term used officially is self-employed, in fact, there is evidence that the situation in villages looks more like under-employment. The International Labor Organization (ILO) made clear that about 300,000 village inhabitants in Albania at present are occupied with work, however, not being paid for their work, they do not pay social and health insurance and they do not pay any taxes. The goal to start with interventions with mobile employment and vocational training services was not realized. Vulnerable groups, such as women, youth, persons with disabilities, the Roma and Egyptians, etc., have limited access to employment and vocational training services. Special employment programs were designed to allow for internships in the workplace through public funds.

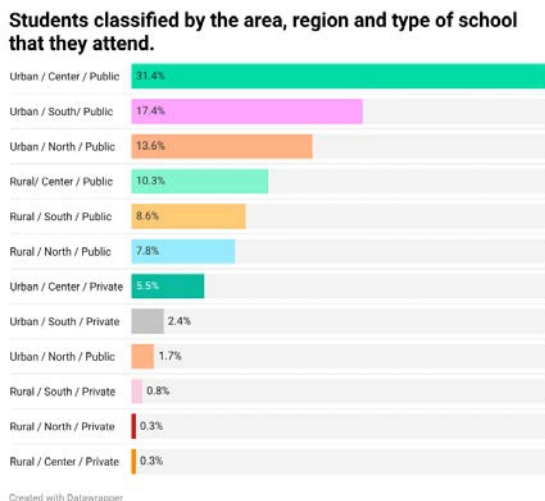


Figure 2. Students classified by the area, region and type of school they attend

The adaptation of these services toward the needs and capabilities of these groups was at the focus of this strategy. However, the continuity of these services and the full coverage of all groups in need remains a challenge. A distribution of students selected by PISA may be found in Fig. 3, which indicates that about 30 percent of the student population is in the villages, according to their own declarations.

Youth employment in Albania

Youth employment remains a priority for a society like Albania, which has a relatively young age. In Albania, the average age on January 1, 2020, was 37.2 years, and the youth age group (15-29 years old) on January 1, 2020, was 23.2 percent of the population. In the last 5 years, the number of the youth population has dropped by 54,950 individuals, although the article finds that the 25-29 age group has increased by 12,902 individuals.

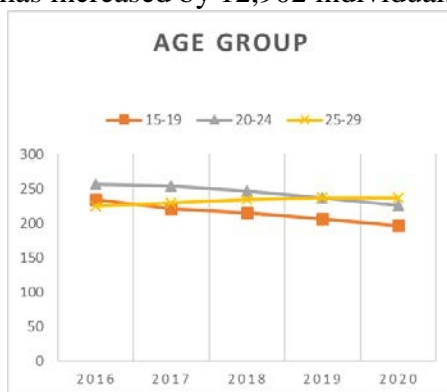


Figure 3. Age demographic status 2016-2020, source INSTAT 2020

Result in unemployment today?

According to the Labour Force Survey 2020, measured by INSTAT, the article finds this growing tendency of the level of employment, with a higher increase among youth age groups. (Fig 4).

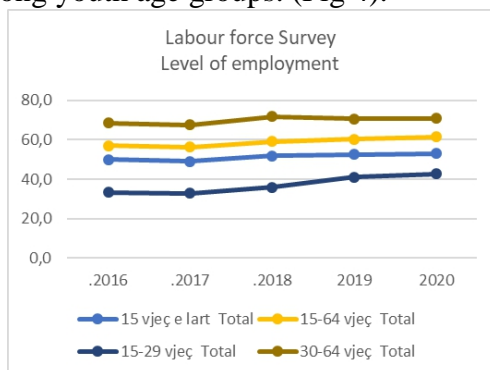


Figure 4. Level of employment

Figure 3, built on data from the Labour Force Survey collected by INSTAT for 2016 until 2020, looks at unemployment tendency by sex.

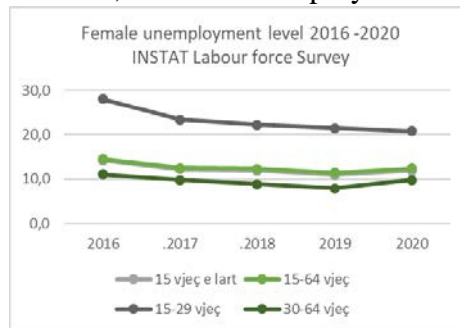


Figure 5. Female unemployment level 2016-2020, LFS 2020

The article finds that the reduction of unemployment among women and girls appears more enhanced in the 15-29-year-old age group, although this age group has a slight demographic growth.

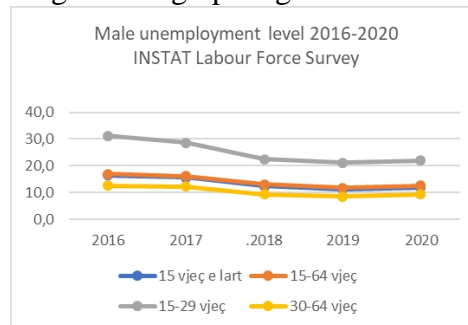


Figure 6. Male unemployment level 2016-2020, INSTAT LFS 2020

At the same time, a look at the level of unemployment among males also indicates a decrease (fig. 4), but the decrease is mainly seen in the 15-29 years old age group category. The same tendency is seen in employment figures, whereby (fig. 6) there is a more evident growth in 15-29 years old age groups.

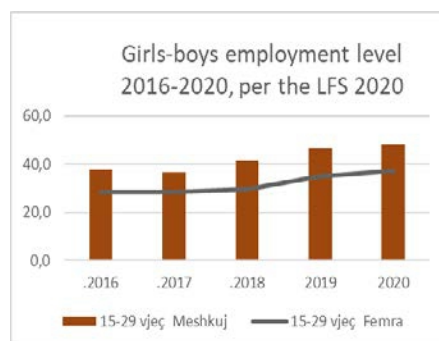


Figure 7. Girls-boys employment level, LFS 2020, 2016-2020

From a gender perspective, the article finds a slight increase of employment among both sexes, while the gender gap in employment remains, in favor of boys.

The increase of youth employment is particularly seen after the expansion of employment through call-center and made-to-order production, which are mostly located in urban areas. Nevertheless, surveys conducted by Friedrich Ebert in Albania suggest that 48% of youth do not work in the field of education they received, while 36% work at a level lower than the education they received. Meanwhile, 83% of youth think that family or friendship ties are decisive for ensuring appropriate employment.

As a result, it may be said that youth unemployment has decreased and employment for the same age has increased, while the gender gap persists.

School availability as an expression of options for further education

PISA 2018 asked students about the possibility to choose schools. As may be seen in Fig. 7, it appears that selecting a school of basic education in Albania is impossible for at least 30 percent of students. This suggests that for 30%, there is no chance to seek a better schooling opportunity, that there is no healthy competition between schools, and that students of the same community do not have opportunities to socialize with students of different profiles, learn from them, and find inspiring models. Rather, they are stuck within the familiar models of expectations within their communities.

The opportunities for education of students by area.

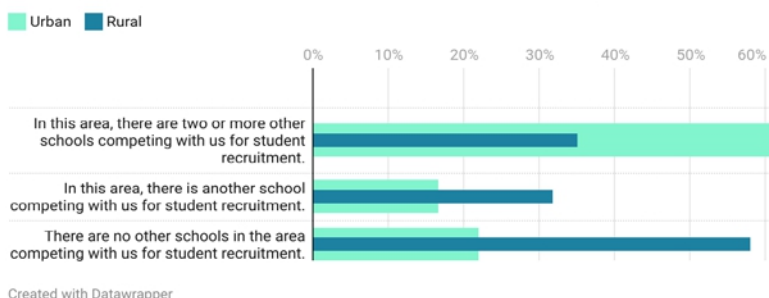
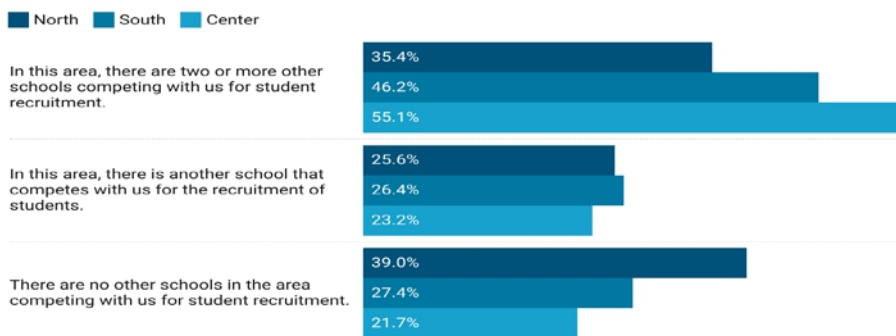


Figure 8. Opportunity to select school in village and city

This lack of choices suggests that the choice for vocational education or beyond it, access to higher education or employment faces an additional challenge: that of distance for students from the more remote areas. The distance of students in basic schools for those 4 km away has been resolved through a grant that covers transportation, but it does not appear to function for high-school ages or above.

The opportunities for education according to the region where the student lives.



Created with Datawrapper

Figure 9. Opportunities for education for students by region – school choice

Aspects of the attitude to learning and book reading

Numerous research studies have argued that the attitude to learning is mostly determined by the home literacy environment. Access to books at home was selected in this research, whose value was assessed by PISA 2018.

It is confirmed that there is low access to books in the home environment, suggesting that the home literacy environment is still poor and, unless measures are undertaken, naturally achievements in reading and all other subjects will remain low and at the limits of learning poverty. Likewise, employment of these students will be only at unqualified levels, which does not allow for thriving and progress. Thus, the question of how many books do you have at home is disturbing due to the response figure of less than 10 books for about 31 percent of students, at a time when it is common knowledge that access to books has a direct correlation with educational results in every subject.

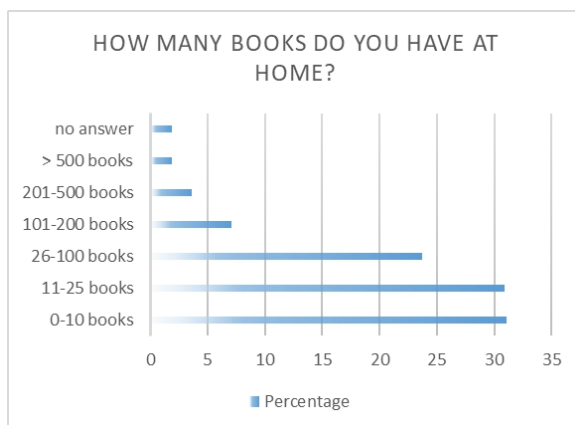


Figure 10. How many books do yo have at home?

The same concern remains also when looking at illustrative Figure 10, which indicates how often students willingly read books, magazines, literary or informative books, with 50 percent of them reading a few times a month. Other data of interest that describe the village and city students' attitudes has to do with responses that students provided for the PISA questionnaire about obstacles to learning, found at addendum 1. One notices there that in fact, the indicators of learning and students' attitude toward school do not have visible differences between villages and cities, which might once again confirm what literature has highlighted: that it is not the school, but rather the PEER factor that is more important in imagining success and efforts to attain it.

School career guidance

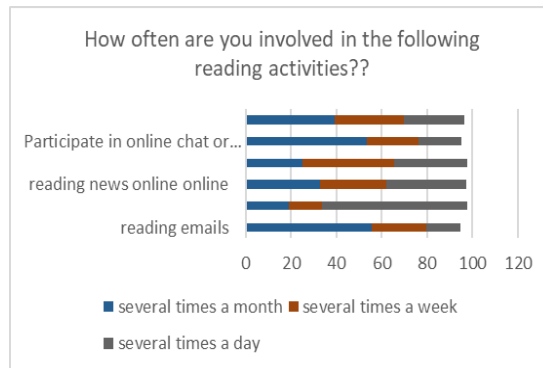


Figure 12. How often do you read the following willingly

School career guidance

Research studies have highlighted that career guidance increases student motivation and their focus for educational results. They also highlight the fact that students from disadvantaged groups benefit more from career guidance because they lack support and information. This is particularly true for balancing gender stereotype gaps in choices for further education or the labor market. The most effective way in OECD countries for doing this are professional counselors (30 percent) or special teachers trained to carry out this function (70 percent) (WORKING IT OUT: CAREER GUIDANCE AND EMPLOYER ENGAGEMENT, 2019).

On questions regarding career guidance in the 9th and 10th grades, students respond almost evenly to the question about the responsibility for career guidance, stressing the lack of a specialized service in this area in their schools. This activity is expected to be carried out by all teachers or one of them.

Thus, 7 percent respond that career guidance does not occur at all in schools. A significant part respond that they receive career guidance services either from specialized personnel in their schools or from mobile personnel visiting school time after time. This suggests that it is likely that this category

belongs precisely to vocational schools serving 10th grades, where school autonomy is a reality. Thus, 3.9 percent claim that their schools have hired career guides and 12 percent respond that they have career guides who visit their schools time after time.

The overwhelming majority of responses suggest that career service is offered by school teachers. 42 percent respond that a teacher in their school has been assigned as a career guide and 35 percent respond that all teachers provide a bit of this service.

It is worth mentioning the fact that the teacher, in the Law on Pre-University Education is defined as the person who has earned the right to exercise the teaching profession in pre-university education, while basic schools only have room for assistant teachers and psycho-social services. It is maybe due to this reason that career guidance services are not included in training about career guidance and information on the labor market.

"Who has the primary responsibility for career guidance for 9th and 10th graders in your school?"

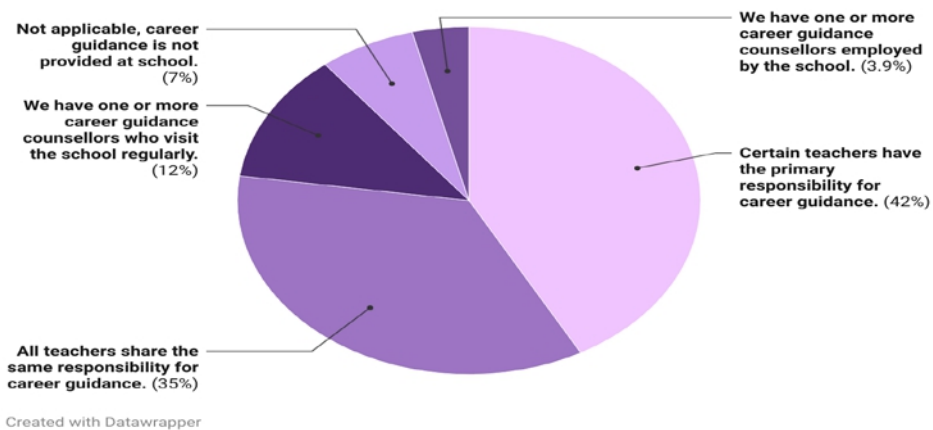


Figure 13. Career guidance responsibility in schools, grades 9 and 10, by size of community

Conclusions

1. It was noticed that the lack of choices of schools is more evident among village students, whereby 58% declare that there are no other schools that may compete for student recruitment in the area, followed by the northern region, whereby 39% of students declare a lack of options of other schools.
2. Act on Pre-University Education and the Act on Vocational Education do not envisage career guidance services. Likewise, there are no clear provisions about this service, no mentioning of any counselor in school staffs, or regarding specialized employment services.

3. It may be said that obstacles to learning among villages and cities are not found in schools, but particularly in the access to a reading environment at home, as well as the learning habit.

Recommendations

Based on the findings described above, the article presents the following recommendations:

1. Expansion of employment services to the villages, to ensure access for basic education and high schools, will enable development of the labor market in these areas in order for youth employment to include the villages too.
2. Expansion of specialized career guidance services in basic education schools should be accompanied by legal improvements of the definitions of self-service and should recognize the profession of the career counselor, regulating it by age groups.
3. Schools should be more active in supporting students without a home literacy environment, creating possibilities for access to books in school, particularly informative books and those of a technical nature, which would expand the horizons of students to envisage options for productive activity.
4. Deficiencies in school selection should be filled by familiarizing students in isolated localities with alternative schools, particularly those of better performance, e.g. through the creation of school networks. Distances to better, specialized schools such as professional ones as well as the general middle schools or higher ones should be overcome by providing financial facilities for transportation but also accommodation, especially for girls.

References:

1. Cordula Artelt Jürgen Baumert Nele Julius-McElvany. (2003). LEARNERS FOR LIFE, STUDENT APPROACHES TO LEARNING. Paris: OECD.
2. Dictionary.com. (2021, March 24). Retrieved from <https://www.dictionary.com/>
3. (n.d.). Education and Training 2020. Bruxelles: European Union.
4. (2013). Education quality and opportunities for skills development. Albania an analysis of PISA 2009-2012. Washington DC: the World Bank.
5. Guide on Measuring Human Capital. (2016). Geneva: UNECE (UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE).

6. <https://www.cedefop.europa.eu>. (n.d.). Retrieved from <https://www.cedefop.europa.eu/en/news-and-press/news/europe-2020-employment-performance-monitor-and-benchmarks>
7. Human Capital Project. (2021, March). Retrieved from <https://www.worldbank.org/en/publication/human-capital>
8. Human Capital: a theoretical and Empirical Analysis, with Special Reference to Education. (1975). New York: National Bureau of Education.
9. Labour Force Survey. (2013). Albania: INSTAT.
10. Recognising Non-Formal and Informal Learning. (n.d.). OECD.
11. National Strategy for Employment and Skills. (2014). Tirana: Ministry of Social Welfare and Youth.
12. WORKING IT OUT: CAREER GUIDANCE AND EMPLOYER ENGAGEMENT. (2019). Paris: OECD.
13. World Economic Forum. (2017). The Global Human Capital Report 2017. WEF.

Websites:

1. Ministry of Social Welfare and Youth (2016), , Republic of Albania, Tirana, <https://www.al.undp.org/content/albania/en/home/library/poverty/national-action-plan-persons-with-disabilities-2016-2020.html>
2. Ministry of Social Welfare and Youth (2015), National Action Plan for Integration of Roma and Egyptians in the Republic of Albania, 2015-2020, Government of Albania,
3. Tirana, https://www.rcc.int/romaintegration2020/download/docs/2015%20Action_Plan_Albania%202015%202020.pdf/3e50b7165e9ea151a49dd99c0491ea64.pdf
4. Ministry of Social welfare and Youth (2014), National Employment and Skills Strategy 2014-2020, Republic of Albania, https://financa.gov.al/ep-content/uploads/2018/09/NESS-ENG-8-1-15_final-version.pdf
5. MoESY (2018), OECD Review of Evaluation and Assessment: Country Background Report for Albania, Ministry of Education, Sports and Youth, Tirana



ESJ Social Sciences

The Open Secret Of Male Prostitution In The Philippines: A Descriptive Phenomenological Study

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Abstract

This study attempts to describe the lived experiences of the male teenager and adult sex workers of Cebu City, Philippines in terms of their attitude and behavior, reasons for indulging in prostitution, clientele, challenges, and coping mechanisms. A descriptive phenomenological design with personal interviews and a naturalistic paradigm were used to gather data from the purposely chosen participants. Triangulation was carried to validate the participants' responses. Results show that male teenagers and adult sex workers tend to be covert of their work, neglectful of others' judgment about prostitution, and view prostitution as any other job. Poverty, lack of parental guidance and support, early exposure to pornography, peer pressure, unemployment due to poor educational attainment were their reasons for indulging in prostitution. They catered to random bisexual and transgender clients. They encountered various problems such as awkwardness with their partner, financial instability, public distress, and fear of HIV transmission. Getting motivation from the money as payment, sustaining their own and family's needs were their means of coping up. Resorting into prostitution is a story to tell. Male teenagers and adult sex workers experienced poverty as their common denominator of indulging in prostitution. Though they are condemned by society for entering prostitution they intend to provide and suffice their needs. Prostitution, therefore, is a means to survive amidst living in poverty.

Keywords: Male Prostitution, Attitudes, And Behaviour, Reasons, Clientele, Challenges, Coping Mechanism

Introduction

One of the continually-arising global problems that countries across the world are constantly combating is prostitution (Feingold, 2005; Huges & de Compostela, 2004). The term prostitution connotes sexual satisfaction services in exchange for compensation (O'Connell Davidson, 2007). This payment could be monetary (Ditmore, 2006) or in a form of valuables (Edlund & Korn, 2002). Though this occupation is hazardous by nature (Hayes-Smith & Shekaharkhar, 2010), Singh and Hart (2007) assert that plenty of countries from different corners of the world have shifted their view on prostitution from criminal act to asset for tourist attraction. Huisman and Kleemans (2014) confirm that sex tourism is a wide-ranging market.

There are countries where prostitution has evolved from apparently non-existent to organized sex tourism and industry. Hugo (2002) reveals that Thailand, the Philippines, and Indonesia are among Southeast Asian countries where sex tourism is most common. Cunningham and Shah (2018) refute that the legalization or decriminalization of prostitution elevates the cases of human immunodeficiency viruses (HIV) and acquired immune deficiency syndrome (AIDS). In the Philippines, the Department of Health (DOH) released their poll on HIV cases last October 2018. Results pointed out that men who have sex with other men are the highest cases of HIV rate (Department of Health, 2018).

This poll simply reveals that male prostitution is rampant in the Philippines. By definition, male prostitution refers to the act or practice of rendering sexual services among men as compensation for payment (West, 2012). It is an unconventional form of sex work. Although clients can be of any gender, most are male. Compared to female prostitutes, male prostitutes have been far less studied by researchers.

According to the Department of Health (2018) poll in October 2018, there were a total of 1,072 newly diagnosed HIV-positive individuals. Ninety-five percent of them were male. In terms of mode of transmission, ninety-seven percent acquired HIV through sexual contact. Eighty-six percent of those were male having sex with male.

In accumulated results, from January 1984 to October 2018, there were 2,470 HIV-positive individuals. Sexual contact was the predominant mode of transmission. Fifty-seven percent were males having sexual contact with males. Twenty-one percent were males having sex with both males and females. Eleven percent were males having sex with females. By province, Cebu was ranked as the third-highest HIV rate in the entire archipelago,

second in the rank was Region 4A while the National Capital Region was ranked as the first predominant place of HIV (Department of Health, 2018).

It is for those pieces of evidence that ignited the researcher to pursue this research. This study attempts to describe the lived experiences of a male teenagers and adult sex workers in Cebu City, Philippines in terms of their attitudes and behavior, reasons for indulging in prostitution, clientele, challenges, and coping mechanisms.

Literature Review

It has been debated that prostitution equates to human trafficking (Weitzer, 2010). Though it imposes a problem, it is considered a million-dollar business (Edlund & Korn, 2002). The term prostitution often denotes a crisis of human rights in sexual exploitation among children and women. Outshoorn (2005) justifies that human trafficking is primarily caused by prostitution. Hence, creating laws can regulate prostitution and lessens the criminal offenses of sex trafficking. Aside from human trafficking offenses, prostitution likewise permits the transmission of sexually transmitted diseases such as gonorrhea and HIV (Cunning & Shah, 2018). In Asia, countries that have high cases of HIV are China, Malaysia, Nepal, Vietnam, and Indonesia, Thailand, Myanmar and India including the Philippines (Kageyama et al., 2009).

Prostitution has now been an asset to some countries, usually termed as sex tourism or sex industry (Mossman, 2007). This phenomenon is rampant in less developing countries (Edlund & Korn, 2002). To combat this fast-growing problem, a lot of countries have been debating whether to legalize or decriminalize prostitution. Sullivan (2005) avers that by implementing so, the escalation of prostitution accompanied by human trafficking will be reduced. Farley (2009) affirms that legalizing prostitution reduces human trafficking.

In the Philippines, male prostitution is a predominant reason of its high HIV rate where the main mode of transmission is sexual intercourse (Department of Health, 2018). The terms used for male sex workers differ from females. Some terms may vary by method of business or clientele. In countries where prostitution is illegal or taboo, male sex workers use euphemisms such as body massage, nude modeling, escort, and other fee-for-service arrangements. A man who does not consider himself as gay, but who renders sexual services with male clients for money, is called gay-for-pay (Escoffier, 2003). With the advent of the Internet, male sex workers find customer online (Pruitt, 2005). This paved the way to gain new mechanisms for male-to-male prostitution (Bimbi & Parsons, 2005).

On the other hand, sex workers are victims of their environmental circumstances (Farley & Kelly, 2000). Individuals who grew up in families and surrounded by neighbourhoods where prostitution was rampant may likely

end up prostituting. Moreover, unemployment and living in extreme poverty are tempting situations to indulge in prostitution (Bamgbose, 2002). Ditmore (2006) asserts that sex workers are relatively seen as lack of self-esteem and self-worth. This is rooted in the stigmatization of society having been involved in prostitution. This societal stigmatization of prostitution made sex workers vulnerable to physical attacks (Lowman, 2000). Since prostitution is illegal in most places, the transaction happened in the dark streets, where the security of the sex workers against aggressive customers is compromised (Kurtz et al, 2004).

As in any form of the sex industry, male sex workers face risks and problems. These risks include criminal risks and health-related risks like the transmission of sexually transmitted diseases. They are prone to physical abuse and social abuse such and gay-bashing, family, and friend rejection. Likewise, they also suffered financial risks which stem from having an unstable and low income; and the risks of the emotional effects that come from dealing with all of those factors (Farley & Kelly, 2000).

Methodology

This study is qualitative. It follows a descriptive phenomenological design. It is a kind of qualitative design that aims to study the actual experiences of people experiencing a phenomenon (Bazeley, 2013). It is not meant to generalize instead to give awareness. The natural paradigm was used in the course of data gathering. It is a phenomenological study type that allows the researcher to investigate and analyze the condition of the purposively selected participants. A one-on-one personal interview was carried out with the male sex workers. To avoid biases and ensure the validity of the participants' responses, two of the participants' close friends served as the validators. The use of triangulation allowed the researcher to cross-check the responses and facilitates the understanding of the complex aspects of the participants' responses.

Purposive sampling aided the researcher in determining the participants of the study. The researcher selected six (6) participants and categorized them into a teenager (ages 18-19) and adult (ages 20-above). The data gathered through interviews conducted in an indoor setting of the local area of Cebu City, Philippines.

The participants of the study were interviewed first followed by their two friends to verify their responses. The interview questions were made in English but translated into vernacular in asking the participants for evident understanding and communication. The researcher made use of a voice recorder. The interview questionnaire was made up of questions that sought to answer the information needed.

Results and Discussion

Demographic Profile

The study involved six (6) male sex worker participants. They were categorized by age into two (2) namely: teenager and adult. Three (3) or 50% of the participants were teenagers, and another three (3) or 50% of them were adults. Teenager participants were 18 to 19 years of age. Adult participants were 21 years of age and above.

Two (2) of the teenager participants were studying at the tertiary level. One (1) teenager participant stopped reporting to school. Two (2) of the adult participants were high school graduates and one (1) adult participant was up to elementary level. All of the teenager participants were financially supported by their parents. All of the adult participants were self-supported.

Attitudes and Behaviour of Male Teenager and Adult Sex Workers

Male prostitution may cause wide-ranging impacts on the attitudes and behaviour of those who opt to indulge in this activity. Though the Philippine society considers prostitution as an indecent job, few of the participants appeared to disregard the country's standard of living. Despite being prone to ridicule like gay-bashing (Farley & Kelly, 2000), participants tend to disregard what people might say about them and their job. This was testified by participant 2 under the teenager category and participant 4 under adult category.

"I do not care what people say against me. Besides, they are not helping me; I'm not asking help from them either. I just do not mind them because there is nothing I can do with it."

"I do not really care what they say because they cannot provide me with my needs like food. They cannot also provide me with the things I want."

Furthermore, one of the participants elicited positive attitudes towards prostitution. Since prostitution becomes an important source of income (Kaye, 2004), sex workers tend to show commitment to their job. They viewed prostitution the same as any other profession since their daily living needs are sustained in this job. This was confirmed by participant 5, who belongs to the adult category.

"For me, there is no difference between what we are doing from any other jobs. They work hard, we work hard also; they feel tired, we feel tired too. If they are sincere to their work, we are likewise serious so that we can earn income."

Nevertheless, Scott (2003) explains that prostitution was traditionally perceived as a moral problem. Since people perceive prostitution as an improper and derogatory job, some sex workers who tried to be covert with it. As much as possible, they tried to hide it from the public for the reason that

they are not comfortable with the nature of prostitution. This was manifested by participant 3 under the teenager category.

“People thought that we are shameless but we still feel awkwardness. There are times that we are not comfortable with our work but we still do what we do since it is needed. Sometimes, we try to be covert.”

Reasons for Indulging Prostitution of Male Teenager and Adult Sex Workers

All of the participants asserted that poverty is the main reason why they joined this activity. They revealed that they rarely eat delicious food. There were times that they found it hard to suffice their appetite three times a day. Bamgbose (2002) affirms that poverty is the most driving force among sex workers to enter into prostitution. One participant claimed that he was driven to indulge in prostitution due to poverty and lack of parental care and attention. This was testified by participant 1, who belongs to the teenager category, and participant 6, who belongs to the adult category.

“It is really hard when there is no money. No food to eat. We often starve. We individually find ways to eat with my siblings. My mom knows what I am doing. She does not care about it.”

Moreover, peer pressure is also a reason for indulging in prostitution. When an individual has a circle of friends indulging in prostitution, the possibility of ending up prostituting is high (Farley & Kelly, 2000). Participants have admitted that almost all of their friends find income in prostitution. Seeing them buying delicious food, wearing presentable clothes, and having extra money are great temptations to indulge in prostitution. This was manifested by participant 2, who belongs to the teenager category.

“This is also the means of getting an income among my friends. They told me to try so that I get money but I refused it at first. However, seeing them having lots of money, buying delicious foods and nice clothes, I was convinced to try.”

Philippines and Thailand are the epicenters of the sex industry and international sex tourism in Southeast Asia where the sex workers' reasons for entering prostitution is economical need (Tagliacozzo, 2008). Having poor educational attainment and unemployment likewise lead to prostitution. The companies nowadays do not simply hire applicants with poor educational attainment, that even janitorial position requires college level. Thus, those with low educational attainment resorted to indulging in prostitution. This was manifested by participant 4 under the adult category.

“It is really hard to find a job nowadays. If my cousin was not hired for a janitorial position despite being a high school graduate, how much more to me. I just finished Grade 6.”

Nonetheless, while it is quite true that all occupations require sweat and hard work for about a day in exchange for money, some sex workers find their work easier. They bestow sexual and intimate services for few hours only; shorter than other kinds of job. Tomura (2009) corroborates that prostitution is considered an occupation since several individuals are found living on it as depicted in the results of different studies. This was testified by participant 5 under the adult category.

“It is fun sometimes. It is not that exhausting... unlike other jobs, they render service for how many hours while for us, it would just usually take us for few hours only.”

Another factor that leads one to indulge in prostitution is curiosity. One participant revealed that as early as elementary, he was already exposed to nude photos and movies that involve sensual scenes. With this exposure, his interest and clamor to mimic the scenes eventually arose. Farley and Kelly (2000) justify that environmental circumstances fuel one to enter into prostitution. This was evident with the response of participant 2, who belongs to the teenager category.

“When I was young, I already saw nude pictures and movies that have lots of sex scenes. I guess, because of those I started to like it.”

Clients of the Male Teenager and Adult Sex Workers

In recent times, finding customers is done online with the advent of the internet (Pruitt, 2005). Most of the participants revealed that they do not have a regular customer. However, most of their clients are bisexual and transgender. They bestow intimate and sexual services among men for payment (West, 2012). The evidence was manifested by participant 2 under the teenager category.

“We have random customers but most of them are call center agents, maybe because their workplace is just near from our place. Most of them are bisexual and transgender.”

Challenges and Coping Mechanism of Male Teenager and Adult Sex Workers

Male teenagers and adult sex workers encountered various problems. Since our culture viewed prostitution as an indecent job, participants tend to suffer public distress. Some of them were discriminated against due to the nature of their work. Farley and Kelly (2000) elucidate that gay bashing and rejection from friends and family are the common social abuse they experience from indulging themselves in prostitution. They are stigmatized by society (Lowman, 2000). This was testified by participant 1, who belongs to the teenager category.

“Discrimination is unavoidable. I have experienced it a couple of times because of the nature of my work. I have nothing to do with that. I do not care at all.”

Moreover, since they aspired to have an intimacy with women, at first they found it awkward to have an intimacy with bisexual and transgender especially if their client looks immensely masculine. The evidence were manifested by participant 3, who belongs to the teenager category, and participant 6, who belongs to the adult category.

“On my very first try, the feeling was so uncomfortable. The feeling of having sex with a man is so awkward. I was also scared of what might he do to me, knowing that he was more masculine than me. But I got used to it.”

“I once had a bald customer. He looks very manly. I guess, he looks more manly than me and it feels so awkward.”

Since prostitution is a predominant reason for the transmission of sexually transmitted diseases if not protected (Cunning & Shah, 2018; Department of Health, 2018), some of the participants also encountered problems like fear of acquiring HIV. Since it is by nature of their work to have different partners every day, it is possible to be contaminated with HIV. Though they prefer using protection, some clients are not satisfied when using it. Additionally, being caught by the police is one of their worries. Street sex workers tend to be covert of their job since they can be arrested by police officers. This occurs in countries where prostitution is illegal and taboo (Farley, 2009). This is testified by participant 1 under the teenager category and participant 5 under the adult category.

“I like to use a condom so that I have protection, but there are some customers who choose not to use a condom. In times like this, I worry to be contaminated with HIV.”

“It is never easy to escape and hide from the policemen when they are around. They arrest those prostitutes who find customers on the street. It is like playing hide-and-seek.”

In addition, there were also times that they went home without meeting any customer. Prostitution is seasonal by nature. Because of this, they suffer financial instability. They earn income inconsistently daily, the reason why they suffer financial risks (Farley & Kelly, 2000). This is testified by participant 4, who belongs to the adult category.

“There are times that we are lucky but there are times as well that there is no customer. We go home without getting something.”

Most of the male teenagers and adult prostitutes shared the same coping mechanisms for their problems. Getting motivation from the money they received, clamoring for sustaining both their family and individual needs and wants are their means of coping with their problems. This is manifested

by participant 2 and 3 under the teenager category and participant 5 who belongs to the adult category.

“At first, I was nervous. I was hesitant if I should continue. I almost gave up but he offered me good amount. I did not anymore complain. My thinking was, what an offer! Where could I get that?”

“Even if I do not like it but when I think about the money I would receive, I feel like doing it. Why not? It is my chance so that I can buy the things I needed plus it is also a big help to my family.”

“I would love to help my family. I made myself open to this kind of work because of my mom. I witnessed her sacrifices for us that she serves other families as a nanny.

Table 1. Summary of the Responses of Male Teenager Sex Workers

Teenager Sex Workers	Attitudes & Behavior	Reasons for Indulging Prostitution	Clientele	Challenges	Coping Mechanism
Participant 1	Does the job with commitment, does not mind what people say	Poverty, less parental care and attention	Bisexual and transgender call center agents	Awkwardness towards the client, public distress	Motivation on money and sustaining own & family's needs
Participant 2	Does not mind what people say	Curiosity, poverty, peer pressure, early exposure of nude pictures	Random bisexual and transgender clients, mostly call center agents	Public distress & discrimination, financial problem,	Motivation on money and providing one's wants and needs
Participant 3	Covert of his work, not comfortable of his job	Poverty, Peer Pressure	Random Bisexual and Transgender Clients	Fear of acquiring HIV, Financial problem, Awkwardness Towards the client	Motivation on money and supporting own projects or outputs in school

Table 2. Summary of the Responses of Male Adult Sex Workers

Adult Sex Workers	Attitudes & Behavior	Reasons for Indulging Prostitution	Clientele	Challenges	Coping Mechanism
Participant 4	Does not mind what people say	Poverty, less job opportunity due to poor educational attainment	Random Bisexual and Transgender Clients	Financial instability, fear of being caught by police officers	Motivation on money and providing own wants and needs
Participant 5	Views prostitution as any other	Poverty, easy access of money	Random Bisexual and	Awkwardness to the client, financial	Motivation on

	job, Does not mind what people say	while enjoying, early exposure of nude pictures	Transgender Clients	instability, fear of acquiring HIV	money and providing own wants and needs
Participant 6	Covert of his work, not comfortable of his job	Poverty, less job opportunity due to poor educational attainment	Random Bisexual and Transgender Clients	Financial instability, Awkwardness to the client, fear of being caught by police officers	Motivation on money and providing own & family's wants and needs

Conclusion

Resorting into prostitution is a story to tell. Male teenagers and adult sex workers experienced poverty as their common denominator of indulging in prostitution. They shared the same coping mechanism to combat their challenges which to providing their own and family's needs. These intentions made most of them view prostitution as any other job. Though they are condemned by society for entering prostitution they intend to provide and suffice their needs. Prostitution, therefore, is a means to survive amidst living in poverty.

References:

1. Bamgbose, O. (2002). Teenage prostitution and the future of the female adolescent in Nigeria. *International Journal of offender therapy and comparative criminology*, 46(5), 569-585.
2. Bazeley, P. (2013). *Qualitative data analysis: Practical strategies*. Sage
3. Bimbi, D. S., & Parsons, J. T. (2005). Barebacking among Internet-based male sex workers. *Journal of gay & Lesbian psychotherapy*, 9(3-4), 85-105.
4. Cunningham, S., & Shah, M. (2018). Decriminalizing indoor prostitution: Implications for sexual violence and public health. *The Review of Economic Studies*, 85(3), 1683-1715.
5. Department of Health (2018). *Newly diagnosed HIV cases. HIV/AIDS & Art Registry of the Philippines*. Retrieved from https://www.doh.gov.ph/sites/default/files/statistics/EB_HIV_October_AIDSreg2018.pdf
6. Ditmore, M. H. (Ed.). (2006). *Encyclopedia of prostitution and sex work (Vol. 1)*. Greenwood Publishing Group.
7. Edlund, L., & Korn, E. (2002). A theory of prostitution. *Journal of political Economy*, 110(1), 181-214.

8. Escoffier, Jeffrey. "Gay-for-pay: Straight men and the making of gay pornography." *Qualitative Sociology* 26.4 (2003): 531-555.
9. Farley, M., & Kelly, V. (2000). Prostitution: A critical review of the medical and social sciences literature. *Women & Criminal Justice*, 11(4), 29-64.
10. Farley, M. (2009). Theory versus reality: Commentary on four articles about trafficking for prostitution. In *Women's Studies International Forum* (Vol. 32, No. 4, pp. 311-315). Elsevier Science.
11. Feingold, D. A. (2005). Human trafficking. *Foreign Policy*, 26-32.
12. Hayes-Smith, R., & Shekarkhar, Z. (2010). Why is prostitution criminalized? An alternative viewpoint on the construction of sex work. *Contemporary Justice Review*, 13(1), 43-55.
13. Hughes, D. M., & de Compostela, S. (2004, July). Prostitution: Causes and solutions. In Paper delivered at the Conference on Female (pp. 1-7).
14. Hugo, G. J. (2017). Population mobility and prostitution in Southeast Asia. *Moussons. Recherche en sciences humaines sur l'Asie du Sud-Est*, (29), 19-39.
15. Huisman, W., & Kleemans, E. R. (2014). The challenges of fighting sex trafficking in the legalized prostitution market of the Netherlands. *Crime, Law and Social Change*, 61(2), 215-228.
16. Kageyama, S., Agdamag, D. M. D., Alesna, E. T., Abellanosa-Tac-An, I. P., Corpuz, A. C., Telan, E. F. O., & Ichimura, H. (2009). Tracking the entry routes of hepatitis C virus as a surrogate of HIV in an HIV-low prevalence country, the Philippines. *Journal of medical virology*, 81(7), 1157-1162.
17. Kaye, K. (2004). Male prostitution in the twentieth century: Pseudohomosexuals, hoodlum homosexuals, and exploited teens. *Journal of Homosexuality*, 46(1-2), 1-77.
18. Kurtz, S. P., Surratt, H. L., Inciardi, J. A., & Kiley, M. C. (2004). Sex work and "date" violence. *Violence against women*, 10(4), 357-385.
19. Lowman, J. (2000). Violence and the outlaw status of (street) prostitution in Canada. *Violence against women*, 6(9), 987-1011.
20. Mossman, E. (2007). International approaches to decriminalising or legalising prostitution. New Zealand: Ministry of Justice.
21. O'Connell Davidson, J. (2007). Prostitution. *The Blackwell Encyclopedia of Sociology*.
22. Outshoorn, J. (2005). The political debates on prostitution and trafficking of women. *Social Politics: International Studies in Gender, State and Society*, 12(1), 141-155.
23. Pruitt, M. V. (2005). Online boys: male-for-male Internet escorts. *Sociological Focus*, 38(3), 189-203.

24. Scott, J. (2003). A prostitute's progress: Male prostitution in scientific discourse. *Social Semiotics*, 13(2), 179-199.
25. Singh, J. P., & Hart, S. A. (2007). Sex workers and cultural policy: Mapping the issues and actors in Thailand. *Review of Policy Research*, 24(2), 155-173.
26. Sullivan, M. (2005). What happens when prostitution becomes work. An Update on Legislation of Prostitution in Australia, Massachusetts, Coalition Against Trafficking in Women Australia.
27. Tagliacozzo, E. (2008). Morphological shifts in Southeast Asian prostitution: the long twentieth century. *Journal of Global History*, 3(2), 251.
28. Tomura, M. (2009). A prostitute's lived experiences of stigma. *Journal of Phenomenological Psychology*, 40(1), 51-84.
29. West, D. (2012). *Male prostitution*. Routledge.
30. Weitzer, R. (2010). The mythology of prostitution: Advocacy research and public policy. *Sexuality Research and Social Policy*, 7(1), 15-29.



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Le Sentiment De Culpabilité Chez Les Infirmiers Face À La Mort De Patients Au CHU Habib Bourguiba Et CHU Hadi Chaker De Sfax (Étude Descriptive Corrélacionnelle)

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Résumé

Introduction. Le métier d'infirmier implique une confrontation quasi régulière à la morbidité. Cette confrontation, qu'elle soit occasionnelle ou fréquente, constitue un vécu trop souvent marginalisé est encore trop souvent passée sous silence (Saada et al., 2011). Son indélébilité sur le vécu du professionnel est toutefois une réalité. Elle laisse cependant son empreinte dans le parcours de ces acteurs. En effet, confronté à la mort de son patient, le professionnel de soins infirmiers peut ressentir une certaine culpabilité, du fait d'une nonchalance perçue, ce sentiment incontrôlable et insupportable influe négativement sur sa vie et son travail ce vécu devient handicapant aussi bien sur le plan professionnellement qu'en terme de vie privée. **Objectif.** Cet article cherche à explorer et évaluer les relations entre le sentiment de culpabilité et les différents facteurs sociodémographiques (genre, âge, niveau d'étude, état civil, ancienneté, nombre de décès) au sein des professionnels de soins infirmiers de l'Hôpital de Sfax, les hypothèses de la recherche stipulent.

Hypothèse générale :

- Il existe un lien entre le sentiment de culpabilité chez les infirmiers et leurs facteurs sociodémographiques face à la mort des patients.

Hypothèses spécifiques :

- Il y a un lien entre le sentiment de culpabilité et le sexe chez les infirmiers
- Il existe un lien entre le sentiment de culpabilité chez les infirmiers et leur âge.
- Le niveau d'étude constitue un indicateur de développement du sentiment de culpabilité chez les infirmiers.
- Il existe un lien entre le sentiment de culpabilité des infirmiers participants et leurs nombres de décès des patients sous leurs charges.

Méthode. En se basant sur l'inventaire de culpabilité ou Guilt Inventory Scale de Jones et al (2000), cette étude de devis descriptif-corrélationnel fut effectuée sur un échantillon de 131 infirmiers tous genres confondus, dont l'âge moyen est de 32.9 ans. L'avantage de l'outil emprunté, est qu'il offre un score global portant sur le sentiment de culpabilité à mesurer en plus d'apporter une évaluation sur les trois dimensions considérées à savoir l'état, le trait ainsi que les normes morales, ce qui est considérable en termes d'exactitude compte tenu de l'objet étudié. **Résultats.** L'un des résultats les plus saillants, est que 76% (n =99) ont exprimé une forte intensité de sentiment de culpabilité. Les résultats ont montré une corrélation positive entre le sentiment de culpabilité et les facteurs suivants : l'âge, le niveau d'étude, l'ancienneté et le nombre de décès. En revanche, une indépendance a été remarquée entre le sentiment de culpabilité, le sexe des participants. **Conclusion.** En conclusion, les résultats de cette étude témoignent que le sentiment de culpabilité, tel qu'évalué par la Guilt Inventory Scale, est très élevé et en corrélation avec les facteurs ; âge, niveau d'instruction, ancienneté au travail, nombre de décès. Il serait recommandé de prendre en considération ces résultats et venir en aide aux infirmiers par une préparation psychologique à la mort d'un patient afin de ne pas être victime d'une dépression ou un autre trouble.

Mots clés: Sentiment De Culpabilité, Mort D'Un Patient, Infirmier, État De Sentiment De Culpabilité, Trait Du Sentiment De Culpabilité, Normes Morales Du Sentiment De Culpabilité

The Feelings of Guilt Among Nurses in Front of the Death of a Patient in the Hospital of Sfax (Descriptive-Correlational Study)

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Abstract

Introduction. The nursing profession involves an almost regular encounter with morbidity. This confrontation, whether occasional or frequent, is too often a marginalized experience and is still too often overlooked (Saada et al., 2011). Its indelibility on the professional experience is however a reality. However, it leaves its mark on the career of these actors. Indeed, faced with the death of his patient, the nursing professional may feel certain guilt, due to a perceived nonchalance. This uncontrollable and unbearable feeling has a negative influence on his life and his work. This experience becomes disabling as well on the plan professionally than in terms of privacy. **Objective.** This article seeks to explore and assess the relationships between the feeling of guilt and the various sociodemographic factors (gender, age, level of education, marital status, seniority, number of deaths) among nursing professionals at the Hospital of Sfax, the research hypotheses state.

General hypothesis:

- There is a causal effect between the feeling of guilt among nurses and their socio-demographic factors in the face of patient death.

Specific hypothesis:

- There is a link between feelings of guilt and sex in nurses
- There is a link between feelings of guilt in nurses and their age.
- The level of education is an indicator of the development of feelings of guilt among nurses.
- There is a link between the feeling of guilt of the participating nurses and their numbers of deaths of the patients under their charge.

Method. Based on the Guilt Inventory Scale of Jones & al (2000), this descriptive-correlational design study was performed on a sample of 131 nurses of all genders, with an average age of 32.9 years. The advantage of the borrowed tool is that it offers an overall score relating to the feeling of guilt to

be measured in addition to providing an evaluation on the three dimensions considered, namely the state, the trait as well as the moral standards, which is considerable in terms of accuracy given the object studied. **Results.** One of the most salient results is that 76% (n = 99) expressed a strong sense of guilt. The results showed a positive correlation between feelings of guilt and the following factors: age, level of education, seniority and number of deaths. On the other hand, an independence was noticed between the feeling of guilt, the sex of the participants. **Conclusion.** In conclusion, the results of this study show that the feeling of guilt, as assessed by the Guilt Inventory Scale, is very high and correlates with the factors of age, level of education, length of service at work, number of deaths. It would be advisable to take these results into consideration and help nurses with psychological preparation for the death of a patient so as not to be a victim of depression or another disorder.

Keywords: Feelings of Guilt, Death of a Patient, Nurse, State of Feeling of Guilt, Trait of Feeling of Guilt, Moral Norms of Feeling of Guilt

Introduction

Le travail d'infirmier confronte de façon immuable à la morbidité, au macabre, à la mort en somme et ce de façon inhérente au métier. Se confronter à la réalité de fin de vie est, pour beaucoup, une épreuve difficile, un véritable dilemme à affronter qui suppose un certain détachement, une force intérieure, de caractère, dirons certains il lui faut aussi connaître la démarche réglementaire pour annoncer aux proches la mauvaise nouvelle (Baussant & Bercovitz., 2011).

Selon LE Goff. (2006), l'approche de la mort est un soin pour lequel on ne reste pas indemne. C'est une relation à l'autre où les émotions sont activées en permanence. Le soignant ne peut être démuné de caractéristiques humaines dont les émotions font partie. Cette fatalité représentée par la mort peut générer, chez le soignant, un sentiment d'impuissance, de colère et de culpabilité.

Du point de vue de Saada et al. (2011) la confrontation des soignants à la mort, qu'elle soit occasionnelle ou fréquente, est encore trop souvent passée sous silence. Elle laisse cependant son empreinte dans le parcours de ces acteurs.

L'objectif de ce travail est de décrire le degré de sentiment de culpabilité chez les infirmiers à l'Hôpital de Sfax, et ce au travers de l'identification et de l'exploration des relations possiblement existantes entre le sentiment de culpabilité et les différents facteurs sociodémographiques cités dans cette recherche (genre, âge, niveau d'étude, état civil, ancienneté, nombre de décès).

Problématique

Face à la mort d'un patient, le soignant est à la fois heurté par la réalité de fin de vie impliquant autrui mais aussi l'impliquant lui-même avec tout ce que cela entraîne comme dilemmes, doublement touché par des obsessions intérieures. En tant qu'individu d'abord, il est soumis à la crainte de sa propre mort, de celle de ses proches et au souvenir des décès antérieurs qu'il a pu connaître. De plus, en tant que praticien, l'infirmier peut souffrir d'un échec narcissique important (Maubon., 2011, cité par Fontaine et Wendland., 2015).

Lert et Marne. (1993) expliquent dans leur étude sur "*Les soignants face à la mort des patients atteints du sida*", que ; « la mort est une violence pour les soignants, générant sentiment d'échec, culpabilité et pour y faire face, conduites d'évitement, conflits ». (p. 201)

Maubon et al. (2011) ont également évoqué la douleur parlée de la douleur du deuil chez l'infirmier, car être confronté de manière récurrente à la mort de « son patient », peut faire souffrir le soignant. La première confrontation avec la mort d'un patient, laisse des souvenirs importants et durables, fait naître des émotions multiples. Être confronté régulièrement et fréquemment à la mort est considéré et vécu comme cause de souffrance psychique. C'est ainsi que certains chercheurs (Lachambre et Marquet, (2008) ; Tripiana et Lei., (1995), cité dans Maubon et al (2001)) ont étudié l'incidence accrue de la mort d'un patient sur le personnel soignant. Pour Maubon et al., (2011), la mort d'un patient pose la question des compétences ainsi que la culpabilité qui peut en découler. Elle constitue une source majeure de souffrance dans le deuil. Elle crée en plus un sentiment « d'impuissance » qui accompagne les professionnels, notamment celui de ne pas avoir d'impact sur le pronostic vital du patient. Les psychologues invoquent le concept de « sentiment de culpabilité » que Cosnier (1994 : page 140) Définit comme « *un sentiment d'avoir commis une faute ou simplement d'en avoir l'intention* ».

La culpabilité est à l'origine de 70 % des consultations psychologiques. Elle nous fait ressentir l'impuissance, le sentiment d'être inutile et sans valeur, et bien souvent responsable de tout ce qui va mal... En termes d'impact sur notre écologie personnelle, elle affecte aussi bien la santé mentale que physique donnant lieu à des somatisations ; des maux de tête, des troubles d'estomac ou du sommeil. Elle entraîne également l'impossibilité de se détendre, de l'irritabilité, le blâme une autoflagellation ainsi que et des sautes d'humeur (Blondel, 1986).

Indépendamment des traits de personnalité, il n'est pas évident de comprendre les raisons pour lesquelles certaines personnes se sentent coupables de la perte d'une personne/d'un patient. La psychologie l'explique par le fait que le sentiment de culpabilité trouve souvent son origine dans la prime enfance Baker et al., (2012). L'enfant vient au monde totalement démuné, impuissant, dépendant de ses parents. En outre, le sentiment de

culpabilité est forcément lié aux valeurs de la société dans laquelle un être grandit. En Occident, par exemple, l'éducation est marquée par des valeurs religieuses qui se fondent, d'une part, sur une longue liste d'obligations et d'interdictions et, d'autre part, sur la crainte de la faute et sur le sentiment de culpabilité (Duhaime., 2016).

La culpabilité ou la honte augmentent les symptômes de stress post-traumatique. Inversement, les interventions qui offrent un sentiment de sécurité, de soutien, de dignité et de contrôle diminuent ces symptômes (Société canadienne de psychologie, 2014). Elle C'est un sentiment aussi répandu que pénible à vivre. Saine lorsqu'elle survient en réaction à une faute, elle peut envahir l'existence et faire vivre dans la confusion se elle devient pathologique (Duhaime., 2016).

Selon Coulter et Pinto., (1995) et Pinto et Priest., (1991), il existe une corrélation négative entre culpabilité et attitudes : plus le niveau de culpabilité est élevé et moins les attitudes sont favorables. L'on note que la corrélation s'inverse lorsque le niveau des appels à la culpabilité est élevé, les niveaux de colère ressentie et d'irritation le deviennent également. L'étude de Lavoisier-Mérieux (2002) a prouvé qu'un message culpabilisant influence positivement les attitudes, les croyances et favorise l'adoption des comportements préconisés. Foulon (2000) évoque le degré de responsabilité qui incombe aux professionnels soignants, une culpabilité très importante, et donc une particularité dans la gestion de leur(s) deuil(s) des patients décédés.

Dans un cadre théorique propre à la psychologie clinique, Larivey (2002), explique le sentiment de culpabilité comme une émotion relative au groupe social qui repose sur la conviction d'une responsabilité personnelle dans un événement fâcheux, dans lequel on n'est pourtant pas toujours intervenu directement, ou au contraire dans lequel on n'aurait pas pu intervenir. Un exemple est celui du malaise ressenti durablement par un infirmier suite à la maladie ou au décès d'un patient. Il est habituel d'éprouver passagèrement un sentiment de culpabilité à l'occasion du travail de deuil d'un patient suivi en service hospitalier (De Peyrelongue, 2011). L'infirmier envahi par ce malaise (sentiment de culpabilité), se prive des possibilités de s'en déprendre (avec d'autres patients) comme s'il s'agissait d'une responsabilité directe. Pour les deux psychologues cliniciens Engel et Ferguson (1999), c'est l'altruisme excessif et mal dirigé qui est parfois source de culpabilité. L'infirmier a un besoin inné de venir en aide aux patients, une tendance à être sauveteur. Il se trouve dans la formule suivante : « pas capable – coupable » et elle fonctionne aussi inversement : « coupable -pas capable ». Quand l'infirmier ne se sent pas capable de faire quelque chose, il se sent coupable de son incapacité. Réciproquement, lorsqu'il se sent coupable, cela le rend souvent incapable d'agir. La culpabilité est donc un sentiment archaïque,

latent, qui s'habille de différentes facettes et qui guide les comportements (De Peyrelongue, 2011). On en distingue trois formes :

1. **la culpabilité réactive** : il s'agit d'une « réponse à un acte de transgression des normes d'un comportement acceptable » (Rawlings, 1970, cité dans Chédotal, 2009, page 5)
2. **la culpabilité anticipée** : elle est « ressentie lorsque l'individu imagine ou anticipe une transgression allant à l'encontre de ses principes internes » (Rawlings, 1970, cité dans Chédotal, 2009, page 5)
3. **la culpabilité existentielle** : elle « résulte d'une prise de conscience de l'existence d'un écart entre son bien-être personnel et le bien-être d'autrui, il n'y a pas de notion de transgression » (Hoffman, 1982 ; Izard, 1977, cité dans Chédotal, 2009, page 6). Certaines personnes ressentent plus facilement cette émotion. Selon Baumeister et al (1994) et Tangney, (1990) les femmes seraient plus sensibles à la culpabilité. Chédotal (2011) ajoute que certains individus seront également plus disposés à ressentir de la culpabilité face à des événements négatifs. Cette tendance à culpabiliser est un trait de personnalité défini par Mosher (1980) comme : « la structure affective et cognitive qui résulte des expériences passées de situations culpabilisantes et qui vont influencer les actions et les perceptions des situations culpabilisantes actuelles » cité dans Berthe et Chédotal (2018, page 297).

Estryn-Behar (1997 : 11) a mentionné que les travaux cliniques, sur la souffrance psychique au travail en milieu hospitalier, se sont basées sur les éléments de « surcharge psycho-émotionnelle » chez les infirmiers. De plus, ce sujet a fait l'objet de l'intérêt de plusieurs travaux (Ilhan et al, 2008 ; Vermieren, 2010) sur la charge psychique, en s'appuyant sur des références à la psychanalyse, à la psychopathologie du travail, à l'ergonomie et sur l'expérience d'une recherche/action.

Durand (1999) a donné une importance à la sensibilisation des équipes de soins (la formation est un moyen). Ce travail de sensibilisation vise un changement des habitudes et pratiques qui demande de la patience et beaucoup de temps. Il pense que cette sensibilisation peut aider le soignant à ne pas faire immédiatement (après la mort de son patient) une évaluation négative de lui-même, de ses capacités et de la situation en général. Le travail, dans ce cas de figure, doit être thérapeutique. C'est un travail de restauration de la parole. Le pronostic du trauma (mort d'un patient) dépend de la prise en charge immédiate de cet événement classé comme traumatique de la répétition du trauma (Daligand, 2001). Apprendre à gérer sa propre frustration de soignant : on est plus dans le « faire-faire » que dans le « faire ». L'évaluation doit être réalisée suffisamment tôt dans l'évolution de la maladie. À ce propos, des

situations cliniques antérieures difficiles, rediscutées avec les acteurs de soins, peuvent être pédagogiques, ainsi que la recherche clinique.

Pour Daligand (2001), le sentiment de culpabilité protège l'infirmier : il faut l'accepter quand on est soignant, mais il faut travailler en tant que tel soignant sur cette culpabilité imaginaire non conforme à la réalité (la honte, honte d'avoir failli...).

Parvenir à une évaluation régulière de la douleur psychologique (frustration culpabilité...) chez les soignants et à des conduites appropriées de soulagement est un exemple illustre la manière de surmonter cette souffrance qui le handicap dans leur travail (Durand, 1999).

Il est intéressant d'étudier le sentiment de culpabilité car il revient aux émotions morales, en relation avec les normes qu'un individu se fixe. Elster (1999) souligne combien les normes sociales ont une influence immensément puissante sur le comportement. Particulièrement le sentiment de honte qui transcende l'intimité, de plus personnel. Comme le notent Tangney & Ronda (2003), c'est une émotion qui a une influence certaine sur l'image que nous avons de nous-mêmes et sur la manière dont on pense être socialement perçu. C'est donc une émotion clé de notre comportement, notamment en situation de prise de décision, qui constitue pour Elster (1999), le support des normes sociales.

Cadre théorique

La culpabilité est un trait universel que chaque être humain éprouve à divers degrés. Elle est liée à la notion de faute, d'erreur, de déviance ou d'échec. Quand on commet ce qu'on perçoit comme un écart à ses principes, on n'ose plus se regarder en face. On se sent coupable et on éprouve de la honte. Puis, lorsqu'on est parvenu à bien se culpabiliser, on s'expose à deux dangers : le premier consiste à se dénigrer, à se faire des reproches, à revenir constamment sur sa faute présumée ; le deuxième, plus courant, comme c'est le cas chez la plupart des criminels, consiste à s'arranger avec sa conscience de manière à ne rien éprouver en se justifiant par toutes sortes d'arguments faciles et arbitraires (Duhaime, 2016).

Le sentiment de culpabilité est généré par le sentiment d'impuissance quand le soignant est confronté à la mort, ce qui traduit que la mort du patient devient une source de souffrance car elle renvoie à l'échec et à la culpabilité (Estryn-Behar, 1997, p.13). La culpabilité survient souvent avant et après le décès. Les personnes atteintes d'une maladie terminale peuvent se sentir coupables si elles se perçoivent comme un fardeau pour leur famille. Les personnes aidantes peuvent se sentir contrariées à cause du temps et de l'énergie qu'elles prennent pour s'occuper de la personne malade, par conséquent, éprouver aussi un sentiment de culpabilité (Société canadienne de la SLA, 1995).

Dans le cadre de cette étude, la théorie cognitive élaborée par Jones et Kugler (1990) et développée par Jones et al. (2000) a été choisie comme modèle théorique.

Historiquement, les chercheurs ont d'abord distingué la honte de la culpabilité selon le contenu ou la structure des événements qui suscitaient de telles émotions. L'idée était que certains types de situations susciteraient la honte (exemple ne pas faire ce qu'il faut faire) alors que d'autres donneraient naissance à la culpabilité (exemple la mort d'un patient) (Ausubel., 1955). En effet, l'expérience phénoménologique du sentiment de culpabilité, et plus particulièrement l'expérience consciente de l'intensité des sentiments culpabilisants a largement été délaissée par les chercheurs en psychologie (Jones et al., 2000).

La culpabilité serait une expérience "privée" impliquant des aspects de sa propre conscience. Gehm et Scherer (1988) affirment d'ailleurs que la honte est habituellement dépendante d'une exposition publique à sa propre vulnérabilité et fragilité, alors que la culpabilité peut être une entité qui reste secrète à l'intérieur de nous, personne ne connaissant nos normes sociales implicites ou notre responsabilité pour un acte immoral.

La culpabilité touche à un comportement spécifique qui est évalué négativement, sans conséquence toxique au niveau self global. Elle n'affecterait donc pas l'identité profonde de l'infirmier (angl. "self-concept"). Dans la culpabilité, il y a un sens de la tension, du remords et du regret au sujet des choses accomplies, et ce sens motive souvent une action réparatrice : se confesser, s'excuser, réparer le dommage causé. C'est la conceptualisation dominante aujourd'hui (qui est également celle de Lewis) de la culpabilité, pour laquelle il existe un support empirique (Mihaescu., 2006).

Bien que les infirmiers aient une capacité à éprouver de la culpabilité à différents moments de leur vie, il y a des différences interindividuelles dans le degré auquel ils sont enclins (trait) à vivre la culpabilité à travers un large panel de situations impliquant les échecs ou les transgressions (Jones et al., 2000). Bien que les sentiments de culpabilité soient suscités par un échec ou une violation des standards moraux, la propension à la culpabilité (en tant que disposition affective) est conceptuellement distincte des standards moraux (définis, comme un ensemble de croyances guidant l'évaluation que l'infirmier fait de ses propres comportements). Il n'est pas clair actuellement, de comprendre en quoi le degré auquel un infirmier ayant une disposition à la culpabilité serait directement une fonction du contenu de ses standards individuels pour ses conduites morales (Jones et al., 2000).

Les chercheurs ont proposé différentes façons de classer la culpabilité et de maintenir une distinction entre la culpabilité morale, la culpabilité trait, et la culpabilité état (Jones et al., 2000 par exemple.). Cette recherche se concentre uniquement sur la culpabilité état et se classe comme la culpabilité

passée ou la culpabilité prévue. La culpabilité passée est définie comme transgression psychologique immédiate ou comme un état affectif plus durable suscité par de transgressions passées. La culpabilité anticipée, en revanche, est définie comme la contemplation par un individu d'une possible violation de l'avenir ou la volonté de faire l'expérience d'éventuelles violations à l'avenir. Cette distinction est similaire à Rawlings (1970) et sa classification des culpabilités réactive et d'anticipation.

Après la proposition d'un cadre théorique, Jones et al (2000) ont développé un instrument de mesure de l'intensité du sentiment de culpabilité porté les trois dimensions suivantes :

- a.** intensité du sentiment de culpabilité (traits) : les émotions interpersonnelles (par exemple, la timidité, la conscience de soi, la colère, etc);
- b.** intensité du sentiment de culpabilité (état) : un sentiment momentané dans des situations précises;
- c.** les normes morales, et le réseau de soutien social, les adjectifs pertinents par des amis et des membres de la famille ; les émotions morales qui motivent le respect des normes sociales et des normes personnelles et émergent dans la petite enfance suite au développement de la conscience de soi.

Ces types de culpabilité diffèrent dans les antécédents qui mènent à l'expérience de la culpabilité et de leurs relations avec les autres constructions. Le but de cette recherche descriptive corrélationnelle est de décrire le sentiment de culpabilité des infirmiers face à la mort d'un patient au CHU Habib Bourguiba et CHU Hadi Chaker de Sfax, et d'explorer les relations entre le sentiment de culpabilité et les facteurs cités dans cette recherche.

L'hypothèse principale stipule :

- Il existe un lien entre le sentiment de culpabilité chez les infirmiers et leurs facteurs sociodémographiques face à la mort des patients.

Les hypothèses secondaires expriment :

- Il y a un lien entre le sentiment de culpabilité et le sexe chez les infirmiers
- Il existe un lien entre le sentiment de culpabilité chez les infirmiers et leur âge.
- Il existe un lien entre le sentiment de culpabilité des infirmiers participants et leurs nombres de décès des patients sous leurs charges.
- Il existe un lien entre le sentiment de culpabilité des infirmiers participants et leurs niveaux d'étude.

Méthode

Devis de recherche

Cette étude est une étude transversale, présentant un d'un devis descriptif corrélationnel, qui se base sur l'approche quantitative. Elle a pour but de décrire l'intensité du sentiment de culpabilité chez les infirmiers qui travaillent aux services de chirurgie générale, SAMU, réanimation chirurgicale et hématologie dans les au sein des hôpitaux universitaires Habib Bourguiba et Hedi Chaker de Sfax L'objectif additionnel est de déterminer les relations entre ce sentiment et les facteurs de l'étude.

Caractéristiques des participants

Nous avons constitué un échantillon de 131 infirmiers travaillant dans les hôpitaux « Habib Bourguiba » et « Hedi Chaker » de Sfax. Il se composait de 75 (57%) infirmières, et 56 (soit 43%) infirmiers, âgées de 27 à 49 ans avec une moyenne d'âge de 32,9 ans et un écart-type de 7,3. Parmi les participants 55,7% (n=73) étaient mariés, 41,2% (n=54) célibataires, et 3,1% (n=4) divorcés. Le niveau d'instruction est jugé élevé, car 75,6% (n=99) avaient un niveau universitaire et 24,4% (n=32) un niveau secondaire. 80,1% (n=105) avaient une ancienneté de moins de 10 ans au travail et 4,6% (n=6) avaient une ancienneté plus que 10 ans au travail. De plus, 61% (n=80) participants avaient vécu moins de 50 décès et 39% (n=51) avaient vécu plus de 50 décès durant leur carrière professionnelle.

Le tableau suivant nous montre plus de détails sur les caractéristiques de la population :

Tableau n° 1. Facteurs sociodémographiques des participants

	Facteurs	Effectifn	Pourcentage %
Sexe	<i>Femme</i>	75	57,3
	<i>Homme</i>	56	42,7
Age	<i>27 ans</i>	28	21,4
	<i>28-34 ans</i>	70	53,4
	<i>35-41 ans</i>	10	7,6
	<i>42-48 ans</i>	17	13
	<i>49 ans</i>	6	4,6
Etat civil	<i>Célibataire</i>	54	41,2
	<i>Divorcé</i>	4	3,1
	<i>Marié</i>	73	55,7
Niveau d'instruction	<i>Secondaire</i>	32	24,4
	<i>Universitaire</i>	99	75,6
Ancienneté	<i>De 1 à 5 ans</i>	48	36,6
	<i>De 6 à 10 ans</i>	57	43,5
	<i>De 11 à 15 ans</i>	6	4,6
	<i>De 16 à 20 ans</i>	0	0
	<i>De 21 à 25 ans</i>	20	15,3
Nombre de décès	<i>≤ 50</i>	80	61,1
	<i>> 50</i>	51	38,9

Méthode d'échantillonnage

Dans cette recherche la méthode d'échantillonnage probabiliste (aléatoire) stratifié a été utilisée et ce en se basant sur la liste de services dans les hôpitaux où des décès de patients ont été enregistrés. Cette méthode est la plus fréquemment utilisée pour effectuer une sélection aléatoire. Les principales étapes consistaient à :

- définir la population des infirmiers qui travaillent dans les services cités ci-dessus ;
- préparer la liste de tous les services de la population étudiée ;
- certifier que la sélection est aléatoire simple par le choix au hasard.

Comme nous le montre le schéma suivant :

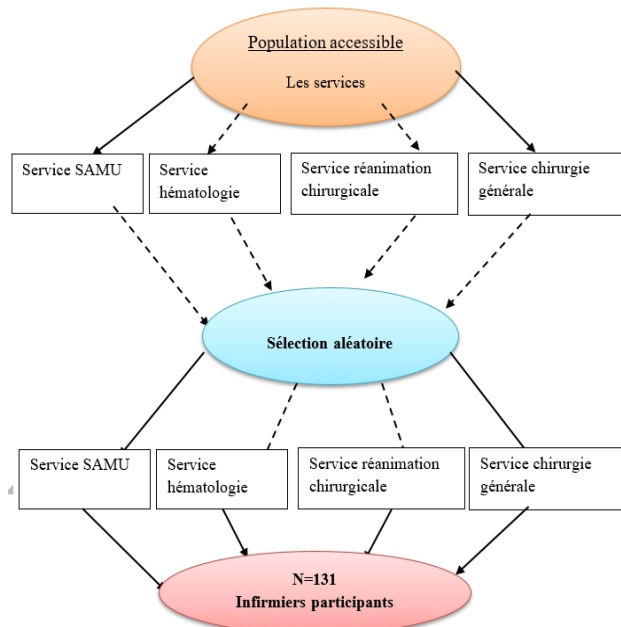


Figure N°1. Méthode d'échantillonnage aléatoire stratifié non proportionnel

L'instrument d'investigation

Afin de décrire et comprendre l'intensité du sentiment de culpabilité chez les participants face à la mort d'un patient, nous avons choisi la Guilt Inventory Scale (GIS) de Jones et al., (2000) dans sa validation en version française effectuée par Godbout et al., (2005) (Curadeau., 2006). C'est en utilisant une approche cognitive comportementale, que Kugler et Jones (1992) et Jones et al., (2000) ont mis au point une échelle de mesure de l'intensité de sentiment de culpabilité. La Guilt Inventory Scale nous semble l'instrument s'approchant le plus des manifestations émotionnelles et comportementales associées au sentiment de culpabilité décrites. Comme d'autres instruments de

mesure du sentiment de culpabilité ayant servi de support à des études empiriques, cette échelle a l'avantage de fournir un score total de l'intensité actuelle du sentiment de culpabilité vécu.

Cet instrument cherche à identifier le sentiment de culpabilité chez les infirmiers face à la mort d'un patient en étudiant les trois domaines pertinents (état, trait, normes morales) pour l'évaluation de la culpabilité ; ces dimensions étant la base de création de la conception de l'intensité du sentiment de culpabilité. Il comporte 45 items relatifs à l'évaluation de la culpabilité état, des présents sentiments de culpabilité fondés sur les transgressions actuelles ou récentes restantes (10 items : 4, 16, 17, 19, 30, 33, 36, 37, 43 et 45.). La culpabilité trait, définie comme sentiment continu de culpabilité au-delà des circonstances immédiates, est évaluée grâce à 20 items (2, 5, 6, 8, 9, 10, 12, 14, 20, 21, 23, 26, 27, 29, 31, 34, 35, 40, 41 et 44), tandis que les normes morales, qui se définissent soit comme l'abonnement à un code de principes moraux sans référence, soit comme des comportements spécifiques de perception des croyances spécifiques, sont mesurées avec 15 items (1, 3, 7, 11, 13, 15, 18, 22, 24, 25, 28, 32, 38, 39 et 42). Rappelons toutefois que chacune des dimensions susmentionnées possède une mesure directe qui lui est propre.

L'échelle utilisée dans cet inventaire est une échelle ordinale de type Likert avec une modalité de réponse allant de 1 (fortement en désaccord) à 5 (fortement en accord).

Les scores

Pour chaque échelle, approximativement la moitié des items est cotée inversement, pour refléter moins de culpabilité ou moins de standards moraux. Les items sont donc cotés de telle sorte que plus le score de chaque item est élevé, plus cela reflète l'ampleur du sentiment de culpabilité ou des standards moraux. Dans le cadre de cette étude, seul le score total cumulé des trois échelles est retenu comme indice de l'intensité de la présence d'un sentiment de culpabilité (Jones & Kugler.,1993). Il est donc calculé de la façon suivante:

Pour l'état de culpabilité :

- de 0 à 30 : une faible intensité de sentiment de culpabilité (état);
- de 31 à 50 : une forte intensité de sentiment de culpabilité (état).

Pour le trait de culpabilité :

- de 0 à 60 : une faible intensité de sentiment de culpabilité (trait);
- de 61 à 100 : une forte intensité de sentiment de culpabilité (trait).

Pour les normes morales :

- de 0 à 45 : une faible intensité de sentiment de culpabilité (normes morales)
- de 46 à 75 : une forte intensité de sentiment de culpabilité (normes morales).

Pour les résultats globaux :

- de 0 à 135 : une faible intensité de sentiment de culpabilité ;
- de 136 à 225 : une forte intensité de sentiment de culpabilité.

Validité et fiabilité de l'échelle de culpabilité (GIS)

Les fiabilités interne et test-retest de l'instrument ont été démontrées, et la validité a été contrôlée par le calcul de la convergence des moyennes ainsi que la validité discriminante de chaque échelle et ce, en utilisant une série de mesures alternatives à l'intérieur de chacun des trois domaines (c'est-à-dire le trait, l'état, et les standards moraux). La validité a ainsi été établie en démontrant que chaque échelle était plus fortement liée à la moyenne avec des échelles alternatives à l'intérieur de ses domaines qu'avec des échelles alternatives d'autres domaines (Kugler & Jones., 1992). La Guilt Inventory Scale a aussi été utilisée dans les recherches ciblant la nature interpersonnelle de la culpabilité (Jones & Kugler, 1993; Jones et al., 1995) et a été reconnue pour son importance en clinique (Dorahy & Schumaker, 1996; Meehan et al., 1996 cités par Curadeau., 2006).

Jones et al. (1992) rapportent une consistance interne (alpha de Cronbach) pour la propension à la culpabilité de 0,89, pour l'état de culpabilité de 0,83, et pour les standards moraux de 0,81, chez un échantillon de 1041 adultes. La fiabilité test-retest après 10 semaines d'intervalle se situe, pour la culpabilité-trait à 0,72, pour l'état de culpabilité à 0,56, et pour les standards moraux à 0,81 (Curadeau., 2006).

Fiabilité de l'échelle de culpabilité dans cette étude :

Dans cette recherche, nous avons confirmé la consistance interne de l'échelle avec un test de fiabilité qui a montré une cohérence interne très satisfaisante ($\alpha = 0.733$; pour $n = 131$, et un nombre d'items =45).

Plan d'analyse

La saisie et l'analyse statistique des données ont été effectuées sur Statistical Package for The Social Science® (SPSS, version 20.0). Des analyses descriptives, et l'analyse bivariée par le calcul du test de Chi2 et le Coefficient V de Cramer, ont été effectuées tout en considérant les relations significatives lorsque $p < 0,05$.

Déroulement de l'enquête

La collecte des données a été réalisée entre Janvier et Avril 2013 à l'hôpital de Sfax. Le questionnaire a été passé en auto administration auprès de 310 infirmiers et infirmières. La durée de réponse au questionnaire était de 20 minutes pour chaque participant.

Considération éthique

L'autorisation des chefs des services de chirurgie générale, SAMU, réanimation chirurgicale et hématologie à l'hôpital universitaire Habib Bourguiba et Hedi Chaker de Sfax a été demandée avant la collecte des données. Des mesures ont été prises pour respecter les droits et la liberté des participants ; la liberté concernant la participation ou non à l'étude a été clairement énoncée. La confidentialité des données et l'anonymat des participants sont respectés et assurés. Les infirmiers et infirmières ayant donné leur consentement oral à participer à l'étude ont été informés que leur participation est volontaire, anonyme et confidentielle.

Interprétation des résultats

Dans un premier temps, nous présenterons les analyses descriptives de l'inventaire du sentiment de la culpabilité. Nous présenterons dans un second temps la partie corrélationnelle des variables.

Analyses statistiques descriptive

Les résultats montrent que les sujets ont une moyenne significativement plus élevée au niveau du trait de culpabilité (61.42 ± 7.22), quel celle trouvé pour la dimension normes morales ($53.65 \pm 7,14$) et la dimension l'état de culpabilité (31.16 ± 4.91). Enfin, pour le résultat final, on constate une moyenne égale à ($146,23 \pm 15.89$).

Les pourcentages obtenus via la mesure de l'intensité du sentiment de culpabilité chez les infirmiers face à la mort d'un patient indiquent que ces derniers démontraient une forte intensité de sentiment de culpabilité, soit 76%, $n = 99$.

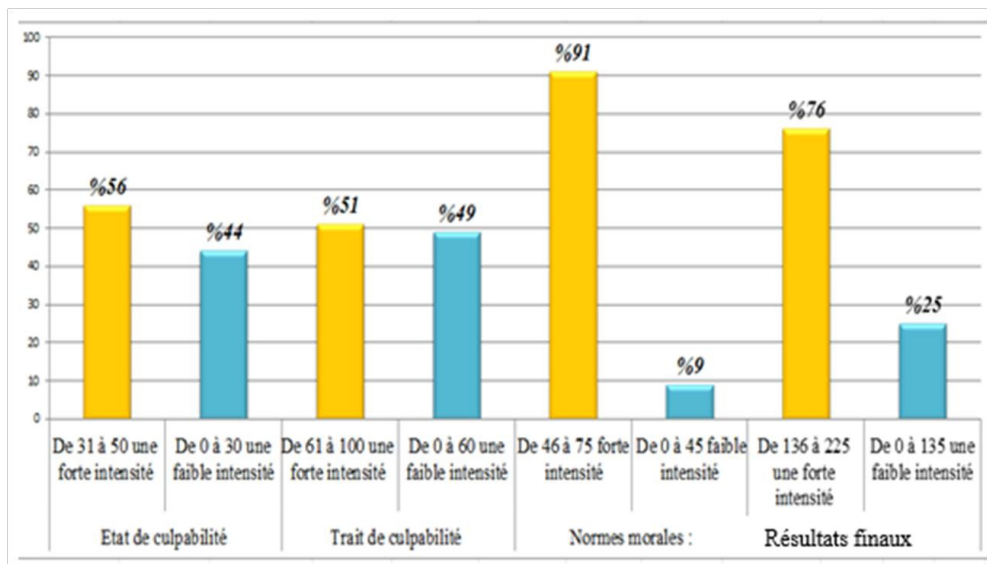


Figure N°2. Distributions des participants selon leur niveau d'intensité du sentiment de culpabilité

Ces résultats reflètent le vécu de l'infirmier devant l'effet traumatique de la mort d'un patient dans les services du SAMU, hématologie, réanimation chirurgicale, ou chirurgie générale. Ceci est confirmé par les résultats de l'étude descriptive de Curadeau (2006). Par ailleurs, la moyenne générale obtenue à la Guilt Inventory Scale (GIS) mesurant la présence et l'intensité actuelle d'un sentiment de culpabilité, laquelle est de 123,61 (É.-T. = 22,10). De plus, Gil-Monte (2008) a montré que le sentiment de culpabilité a un rôle important dans l'apparition de l'épuisement professionnel des soignants. Il est important de voir les résultats de Gil-Monte (2012) qui révèlent que ce sentiment de culpabilité peut progresser de façon parallèle, allant d'un faible enthousiasme pour le travail à l'insensibilité et l'épuisement psychologique jusqu'à l'indifférence. Cette indifférence est considérée comme un dysfonctionnement. Plutôt qu'efficace, la stratégie d'adaptation essayée peut conduire à un sentiment de culpabilité en raison de l'existence de pensées négatives sur les autres. La manière négative et cynique, à faire face à la situation va les pousser à réessayer de se réadapter avec la perte d'un patient.

La mort d'un patient est un événement traumatisant, et les infirmiers vivent et témoignent la souffrance des patients dues à la maladie. Leurs actes et attitudes ont pour principal objectif d'atténuer le traumatisme suscité par l'annonce ou l'évolution de la maladie. À l'approche de la mort, leur approche holistique et leur fonction accompagnante devient utile et nécessaire.

Les résultats obtenus au niveau de la dimension état de culpabilité décrivent ce sentiment momentané face à la mort d'un patient avec un pourcentage de 56 % (n=73) ; les infirmiers répondants vivant un état de

culpabilité avec une forte intensité. Comme nous le décrit Phaneuf (2014 : page ?), la notion essentielle est que la culpabilité n'est pas un sentiment naturel, mais l'effet de la relation à une instance tierce où le soignant peut, malgré les efforts, montrer une expression faciale momentanée qui peut trahir sa maîtrise des émotions : « on ne peut pas toujours maîtriser une moue, un reniflement. » Dans ce sens, et à propos de l'état des émotions, Berne (1971), fondateur de l'analyse transactionnelle, propose une grille de lecture de nos fonctionnements psychiques appelée « les états du moi ». Ce modèle pratique d'analyse permet de comprendre comment l'infirmier perçoit la réalité de la mort d'un patient, agit et entre en relation avec les autres (infirmiers et patients). Un état du moi est : « un ensemble cohérent de pensées, de comportements, d'émotions, de sensations, de systèmes de défense (identification, projection), de croyances. » (Berne, 1971, p13).

Ces résultats confirment ceux obtenus par plusieurs chercheurs dont Figueiredo-Ferraza et al (2013) qui révèlent l'apparition d'un sentiment de culpabilité état chez les infirmiers et que ce sentiment peut développer chez eux des attitudes négatives en milieu professionnel, en particulier envers les personnes malades avec qui ils établissent des relations de travail.

Il est important de souligner que pour la dimension trait du sentiment de culpabilité, les résultats de l'étude montrent que la moitié des participants, soit 51 % (n=67), souffre du sentiment de culpabilité (trait) ; ce qui signifie que ce sentiment devient une caractéristique de la personnalité de l'infirmier, vu le nombre des patients décédés (Ekstedt & Fagerberg, 2005 ; Farber & Miller, 1981 ; Freudenberger, 1974 ; Maslach, 1982). Il semble que la culpabilité trait des infirmiers est impliquée dans le syndrome de l'épuisement professionnel. D'ailleurs, l'une des causes fréquentes des sentiments de culpabilité chez les professionnels est l'existence négative de réflexions sur les autres et la façon négative et cynique qu'ils ont de traiter les patients (Maslach, 1982). Certains professionnels estiment qu'ils sont devenus très sentimentaux et qu'ils souffrent de ce sentiment de culpabilité qui est devenu un trait de leur personnalité et qui les a conduits à réaffirmer leur engagement à prendre soin de leurs patients (Baumeister et al., 1994 ; Tangney et al., 2007 cités par Figueiredo-Ferraza et al., 2013).

Les résultats exposent un degré élevé de forte intensité de sentiment de culpabilité de normes morales soit 91 % (n=119). Dans ce contexte, Jones et Kugler (1993) ont expliqués que la culpabilité est conceptualisée comme des sensations désagréables et remords liés à la reconnaissance que l'on a violé ou est capable de violer une norme morale. L'idée défendue par Baumard et Sperber (2007) est que le comportement moral serait plutôt une stratégie adaptée à un environnement social de type contractualiste. En d'autres termes, ces auteurs considèrent qu'une situation morale est une situation d'action collective comme dans le travail infirmier où les intérêts de l'infirmier entrent

en conflit avec les intérêts collectifs des collègues, et fait le pari que les êtres humains sont naturellement contractualistes, c'est-à-dire qu'ils considèrent spontanément comme "morales" les normes contractualistes (celles que personne ne pourrait raisonnablement rejeter parce qu'elles sont mutuellement profitables). À cela s'ajoute l'idée que dans un environnement où les infirmiers établissent des contrats les uns avec les autres, le comportement moral (qui consiste à suivre les normes contractualistes) s'avère être la meilleure stratégie du point de vue individuel.

Un infirmier qui est considéré comme "bon coopérateur", qui partage équitablement et qui contribue au pot commun sera mobilisé pour mener à bien des actions collectives qui ne posent pas de problèmes et ne développent pas un sentiment de culpabilité, car ces actions apportent des biens qu'on ne peut produire seul, il est donc important d'être rassemblé dans des actions collectives (Baumard, 2007).

Analyse statistique inférentielle

L'analyse corrélationnelle (khi deux de Pearson) a été réalisée entre les différentes variables de l'étude, afin de mettre à l'épreuve les hypothèses de la recherche qui postulent l'existence de relations significatives entre l'intensité du sentiment de culpabilité et les facteurs sociodémographiques cités dans cette recherche.

Tableau N°2. Les résultats des analyses statistiques corrélationnelles khi2 et V cramer

Facteurs	statistiques	Normes morales	État de culpabilité	Trait de culpabilité	Intensité de culpabilité score final
Sexe	Khi-deux de Pearson	0,477	2,905	13,395	0,477
	Signification Valeur de P	0,489	0,088	0,000	0,490
	Valeur de Phi	0,060	0,149	0,32	0,060
	Valeur de V de cramer	0,060	0,149	0,32	0,060
	Valeur approximative signification	0,490	0,088	0,000	0,490
Age	Khi-deux de Pearson	17,005	19,404	10,407	12,807
	Signification Valeur de P	0,002 <i>p < 0,05</i>	0,001 <i>p < 0,05</i>	0,034 <i>p < 0,05</i>	0,012 <i>p < 0,05</i>
	Valeur de Phi	0,002	0,385	0,282	0,313
	Valeur de V de cramer	0,36	0,385	0,282	0,313
	Valeur approximative signification	0,002	0,001	0,034	0,12
État civil	Khi-deux de Pearson	6,298	5,029	12,638	3,603
	Signification valeur de P	0,04 <i>p < 0,05</i>	0,081	<i>p < 0,05</i>	0,165

	Valeur de Phi	0,219	0,196	0,311	0,166
	Valeur de V de cramer	0,219	0,196	0,311	0,166
	Valeur approximative signification	0,043	0,081	0,002	0,165
Niveau d'instruction	Khi-deux de Pearson	4,270	1,682	3,553	7,579
	Signification valeur de P	0,03 $p < 0,05$	0,195	0,05 $p = 0,05$	$p < 0,05$
	Valeur de Phi	-0,181	-0,113	-0,165	-0,241
	Valeur de V de cramer	0,181	0,113	0,165	0,241
	Valeur approximative signification	0,039	0,195	0,059	0,006
Ancienneté	Khi-deux de Pearson	57,75	54,492	52,121	50,351
	Signification valeur de P	$p < 0,05$	$p < 0,05$	$p < 0,05$	$p < 0,05$
	Valeur de Phi	0,664	0,645	0,631	0,62
	Valeur de V de cramer	0,664	0,645	0,631	0,62
	Valeur approximative signification	0,000	0,000	0,000	0,000
Nombre de décès	Khi-deux de Pearson	112,974a	65,308a	109,732a	91,998a
	Signification valeur de P	$p < 0,05$	$p < 0,05$	$p < 0,05$	$p < 0,05$
	Valeur de Phi	0,929	0,706	0,915	0,838
	Valeur de V de cramer	0,000	0,000	0,000	0,000

Relation entre le sentiment de culpabilité et le sexe

Concernant le score de l'inventaire de sentiment de culpabilité, une indépendance a été observée entre l'intensité du sentiment de culpabilité et le sexe ($khi^2 = 0,477$, ddl = 1, $p = 0,490$). Il en est de même pour les deux autres dimensions que sont les normes morales ($khi^2 = 0,477$, ddl = 1, $p = 0,489$), et l'état de culpabilité ($Khi = 2,905$, ddl = 1, $p = 0,088$). En revanche les résultats de la dimension trait de culpabilité ont révélé une corrélation significative entre cette dimension et le sexe ($Khi = 13,395$, ddl = 1, $p < 0,05$). Afin de mesurer l'intensité de cette relation, nous avons calculé le coefficient de V de Cramer qui a indiqué une faible liaison de sa valeur ($V = 0,320$, $p < 0,05$). Ces résultats signifient que malgré le fait que les deux sexes présentent une intensité de sentiment de culpabilité importante, les femmes semblent plus sensibles aux décès des patients. Ces résultats vont dans le même sens que ceux de l'étude d'Etzebarria et al (2009) qui indiquent que la majorité des études sur la culpabilité concluent que les femmes présentent des scores plus élevés que les hommes. Certaines études indiquent que ce résultat pourrait être influencé par l'exposition fréquente à des événements de nature

interpersonnelle (Etxebarria et al, 2009). L'instrument utilisé pour mesurer la culpabilité et les modèles de rôle, de sexe et de socialisation peuvent également influencer ces résultats (Benetti-McQuoid & Bursik, 2005). De cette façon, les hommes développent des rôles féminins (par exemple, en prenant soin).

Relation entre le sentiment de culpabilité et l'âge

Les résultats de l'étude révèlent une corrélation significative entre le sentiment de culpabilité et le facteur âge pour le score final du test du sentiment de culpabilité ($\chi^2 = 12.807$, ddl=4, $V = 0.313$, $p = 0.01$). Cette corrélation positive est également retrouvée pour les sous-dimensions : normes morales ($\chi^2 = 17.005$, ddl = 4, $V = 0.360$, $p = 0.002$), état de culpabilité ($\chi^2 = 19.404$, ddl = 4, $V = 0.385$, $p = 0.001$), et trait de culpabilité ($\chi^2 = 10.407$, ddl = 4, $V = 0.282$, $p = 0.03$). Ces résultats correspondent à ceux de Hoffman (1982, 1998, 2000) et Freud (1923/1961, 1930/1961), qui ont trouvé une différence significative entre l'intensité de la culpabilité habituelle et l'âge. Ils ont également suggéré que cette différence peut être liée à une forte anxiété agressive qui augmente progressivement avec l'âge en cas de non consultation ou de suivi psychothérapeutique. De plus, l'étude d'Etxebarria et al. (2009) a montré une différence légèrement significative de l'âge sur le sentiment de culpabilité ($F(2, 272) = 2,60$, $p = 0,076$, $\eta^2 = 0,019$, puissance observée $V = .516$). En outre, dans l'étude de Barón et al., Etxebarria, (2018), une corrélation négative a été trouvée entre l'âge et la culpabilité ($R = -.23$, $p < .05$).

Relation entre le sentiment de culpabilité et le niveau d'instruction

Le sentiment de culpabilité a été associé au facteur niveau d'instruction par son score final où les résultats statistiques révèlent une significativité ($\chi^2 = 7.579$, ddl = 1, $V = 0.241$, $p = 0.005$). On peut donc noter que plus leur niveau d'étude est élevé (universitaire), plus les participants présentent un sentiment de culpabilité face à la mort de leurs patients. Cela est étayé par les deux dimensions avec les deux dimensions : normes morales ($\chi^2 = 4.270$, ddl = 1, $V = 0.181$, $p = 0.03$) et trait de culpabilité ($\chi^2 = 3.553$, ddl = 1, $V = 0.165$, $p = 0,05$). Cela n'est pas le cas avec la dimension état de culpabilité où les résultats ont révélé une indépendance ($\chi^2 = 1.682$, ddl=1, $p = 0.195$).

Relation entre le sentiment de culpabilité et l'ancienneté au travail

Concernant les liens entre le sentiment de culpabilité et l'ancienneté au travail, on peut observer, là encore, une corrélation significativement élevée et positive pour le score final du test du sentiment de culpabilité en lien avec l'ancienneté des participants ($\chi^2 = 50.351$, ddl = 13, $V = 0.620$, $p < 0,05$), ainsi que pour le lien entre l'ancienneté et les trois dimensions : normes

morales ($Khi_2 = 57.750$, $ddl = 13$, $V = 0.664$, $p < 0,05$), état de culpabilité ($Khi_2 = 54.492$, $ddl = 13$, $V = 0.645$, $p < 0,05$), et trait de culpabilité ($Khi_2 = 52.121$, $ddl = 13$, $V = 0.631$, $p < 0,05$). Cette relation entre le sentiment de culpabilité et l'ancienneté dans la carrière professionnelle a été bien exposée par Phaneuf (2014), qui explique qu'au début de sa carrière, l'infirmier peut avoir une expérience avec des émotions de tristesse et n'arrive pas à les chasser, car la pensée de la mort revient sans cesse l'habiter. La mort d'un patient provoque chez certains infirmiers un sentiment de peur, d'angoisse répandue. De plus, elle ajoute que l'accompagnement de malades en fin de vie nécessite un deuil particulier, car l'infirmier perçoit avec chaque décès d'un patient un échec de sa mission principale. Pour La chambre et Marquet (2008), au moment de l'accompagnement, l'infirmier est en lien d'attachement inévitable et normal qui unit le soignant au soigné. De ce fait, le décès de ses patients nécessite un travail de deuil. Ce travail devient lourd et diffère selon la nature de relations et l'intensité des liens affectifs. Ainsi, au cours de sa carrière, l'infirmier fait l'expérience de deuils multiples.

Relation entre le sentiment de culpabilité et le nombre de décès des patients

Les résultats de l'analyse corrélationnelle suggèrent que le facteur relatif au nombre de décès est davantage associé au sentiment de culpabilité. Ce qui est expliqué par les résultats obtenus comme suit ($khi_2 = 91.998$, $ddl = 16$, $V = 0.838$, $p < 0,05$), nombre de décès et les trois dimensions ; les normes morales ($Khi_2 = 112.974$, $ddl = 16$, $V = 0,929$, $p < 0,05$), l'état de culpabilité ($Khi_2 = 65.308$, $ddl = 16$, $V = 0.706$, $p < 0,05$), le trait de culpabilité ($Khi_2 = 109.732$, $ddl = 16$, $V = 0,915$, $p < 0,05$). Cela signifie que l'intensité du sentiment de culpabilité est forte quand le nombre de décès est élevé. D'ailleurs, Phaneuf (2014) explique que si d'une part le premier défunt dans la carrière d'un infirmier peut le marquer durablement, la répétition de nombreux décès, comme il s'en trouve en soins palliatifs, en soins prolongés et même aux urgences, peut aussi à la longue fortement le troubler. En tant que soignant, il/elle est confronté(e) à la tristesse du départ de personnes qu'il/elle a appris à connaître, qu'il /elle a côtoyé(e)s parfois durant des jours et accompagné(e)s du mieux qu'il/ elle le pouvait dans leurs souffrances physiques et morales. La répétition de rupture de liens par la mort d'un patient peut causer aux infirmiers une certaine usure psychologique qui risque de les fragiliser. Cette auteure ajoute qu'« il est en effet difficile de refermer la porte de la chambre sans en être profondément troublée, ce qui avec le temps devient difficile à porter. »

Conclusion

Cette étude a permis de décrire l'intensité du sentiment de culpabilité face à la mort d'un patient chez les infirmiers au deux CHU de Sfax et de

déterminer et explorer les relations entre le sentiment de culpabilité et les différents facteurs sociodémographiques cités dans cette recherche (genre, âge, niveau d'étude, état civil, ancienneté, nombre de décès). Le choix du sujet est déterminé par l'importance de l'état de l'infirmier et sa souffrance devant le décès d'un patient, surtout que Daligand (2001) a considéré la mort d'un patient comme un pronostic de trauma et que le travail dans ces cas doit être thérapeutique et dépend de la prise en charge immédiate de cet événement classé comme traumatique. D'autre part, Thalmann (2008) affirme que la culpabilité emprisonne, renferme sur soi-même et coupe des autres.

Cette recherche a réussi à répondre aux questions de recherche posées en ce qui concerne la description des concepts de l'étude ainsi qu'à la recherche de relation entre l'intensité du sentiment de culpabilité et les facteurs sociodémographiques. À la lumière des résultats obtenus, nous pouvons déduire que l'intensité du sentiment de culpabilité perçu chez les infirmiers face à la mort d'un patient hospitalisé est très élevée. De plus, les résultats de cette étude ont observé des relations statistiquement significatives entre le sentiment de culpabilité et les facteurs âge, niveau d'instruction, ancienneté au travail, nombre de décès ; ce qui a confirmé les hypothèses mises à l'épreuve. Par contre, on n'a pas trouvé de relation entre le sentiment de culpabilité et le sexe, ce qui signifie que les hommes autant que les femmes souffrent de ce sentiment.

En conclusion, les résultats de cette étude devraient être utilisés pour apporter un soutien aux infirmiers dans l'exercice de leur profession, en leur procurant une aide psychologique, notamment dans les services où on enregistre un grand nombre de décès.

Limites de l'étude

La conduite de cette étude a rencontré des difficultés dont celle relative à la taille modeste de l'échantillon et qui ne permet donc pas une plus grande généralisation des résultats. En effet, étant donné que seuls 4 services ont participé à l'étude, on peut s'interroger sur la représentativité de l'échantillon. D'autres limites de cette recherche sont dues à sa courte durée, qui n'a pas permis de procéder à des observations plus approfondies, sur un grand nombre de facteurs étudiés, et de réaliser des entretiens avec les participants ayant un sentiment élevé de culpabilité, pour comprendre l'influence dudit sentiment sur leur bien-être.

Déclaration d'intérêt

Les auteurs déclarent ne pas avoir de conflits d'intérêts en relation avec cet article.

References:

1. Ausubel, D. P. (1955). Relationships between shame and guilt in the socializing process. *Psychological Review*, 62(5), 378-390.
2. Baker, E., Baibazarova, E., Ktistaki, G., Shelton, K. H., & Van Goozen, S. H. (2012). Development of fear and guilt in young children: Stability over time and relations with psychopathology. *Development and psychopathology*, 24(03), 833-845.
3. Barón M. J. O, Etxebarria I. B, Urquijo P. M. A, López S. C & Aitziber P. J. (2018). Moral emotions associated with prosocial and antisocial behavior in school-aged children. Universidad del País Vasco/Euskal Herriko Unibertsitatea.
4. Baumard, N., & Sperber, D. (2007). La morale. Published in *Terrain*, 48.
5. Baumard, N. (2007). Une solution collective aux problèmes d'action collective ; une approche évolutionnaire, cognitive et culturelle des normes morales. In C. Clavien and C. El-Baz. *Morale et évolution biologique : entre déterminisme et liberté*. Paris Eyrolles
6. Baussant, M., & Bercovitz, A. (2011). Accompagner le deuil : des repères pour les soignants. 06/2011 , vol. 10 , n° 3. Pp.125-129. Elsevier Masson.
7. Benetti-McQuoid, J., & Bursik, K. (2005). Individual Differences in Experiences of and Responses to Guilt and Shame: Examining the Lenses of Gender and Gender Role Sex Role, 53 (2005), pp. 133-142.
8. Berne, E. (1971). *Transactional Analysis in Psychotherapy : Analyse Transactionnelle et Psychothérapie*. Payot.
9. Berthe, B. & Chédotal, C. (2018). La culpabilité au travail : La parole aux salariés. *Relations industrielles / Industrial Relations*, 73(2), 295–318. <https://doi.org/10.7202/1048572ar>
10. Blondel, E. (1986). La culpabilité, une maladie occidentale ? In : *Autres Temps. Les cahiers du christianisme social*. N°10, 1986. pp. 53-59.
11. Burn, E. (1971). *Analyse Transactionnelle et Psychothérapie*. Edition Payot.
12. Chédotal, C. (2009). L'utilisation de la culpabilité en collecte de fonds : une étude exploratoire des réactions des récepteurs. 8^eeme Congrès International des Tendances Marketing, France.
13. Clavien, C. & El-Bez, C. (2007). *Morale et évolution biologique ; entre déterminisme et liberté*. Lausanne : PPUR Presses Polytechniques et Universitaires Romandes, 338 p.
14. Cosnier, J. (1994). *La psychologie des émotions et des sentiments*, Paris, Retz ; en version actualisée : *Emotions et sentiments*. Conférences Université Saint-Joseph, Beyrouth, 2004.

15. Coulter, R. H., & Pinto, M. B. (1995). Guilt appeals in advertising: What are their effects? *Journal of Applied Psychology*, 80(6), 697-705.
16. Curadeau, S. (2006). Perturbations alimentaires et abus émotionnel infantile chez des étudiantes universitaires : rôle médiateur du sentiment de culpabilité. Thèse de doctorat à l'université du Québec à Trois-Rivières.
17. Daligand, L. (2001). Culpabilité et traumatisme. In *Revue Francophone du Stress et du Trauma*, Tome 1(2), 99-101.
18. De Peyrelongue, B. (2011). Le rôle de la culpabilité ressentie dans le consentement à payer : application aux achats pour l'enfant et à l'achat de produits alimentaires bio. Thèse de doctorat, de Bourgogne). Repéré à :<https://tel.archives-ouvertes.fr/tel-00737878/document>
19. Duhaime, B. (2016). La culpabilité. Dans *Ombres et Lumière* Publié sur : www.larchedegloire.com.
20. Durand, H. (1999). Soins palliatifs et accompagnement. *ADSP* n° 28 septembre 1999. Paris.
21. Ekstedt, M., & Fagerberg, I. (2005). Lived experiences of the time preceding burnout. *Journal of Advanced Nursing*, 49(1), 59–67
22. Elster, J. (1999). *Alchemies of the mind : Rationality and the emotion* . Combridge, p. 145ss.
23. Engel, L., & Ferguson, T. (1999). *La culpabilité Broché ne plus la subir ne plus en souffrir*. Editeur Le Jour. 293 pages.
24. Estryng-Behar, M. (1997). *Stress et souffrance des soignants à l'hôpital : reconnaissance, analyse et prévention*. Paris : Éd. ESTEM, 1 vol. (245 p.)
25. Etxebarria, I., Ortiz, MJ., Conejero, S., & Pascual, A. (2009). Intensity of habitual guilt in men and women: differences in interpersonal sensitivity and the tendency towards anxious-aggressive guilt. *Span J Psychol*. 2009 Nov;12(2):540-54.
26. Farber, B. A., & Miller, J. (1981). Teacher burnout : A psycho-educational perspective. *Teacher College Record*, 83, 235-243.
27. Figueiredo-Ferraza, H., Gil-Montea P.R., & Grau-Alberolab E. (2013). Les propriétés psychométriques du Spanish BurnoutInventory (SBI): adaptation et validation auprès d'un échantillon portugais . *Valencian International University, Valencia, Spain*, in *Revue européenne de psychologie appliquée* 63 (2013) 33–40.
28. Fontaine, E., & Wendland, J. (2015). Analyse de la relation soignant-bébé et du deuil des soignants en néonatalogie. Dans *Devenir* 2015/1 (Vol. 27), pages 31 à 52.
29. Foulon, M., (2000). Le cadre face aux rites de passages des soignants. *Recherche en soins infirmiers*, 63, 52-72.

30. Freudenberger, H. (1974). Staff burnout. *Journal of Social Issues*. 30 : 159-65.
31. Gehm, T. L., & Scherer, K. R. (1988). Relating situation evaluation to emotion differentiation: Nonmetric analysis of cross-cultural questionnaire data. In K. R. Scherer (Ed.), *Facets of emotion: Recent research* (pp. 61-77). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
32. Gil-Monte, P. R. (2008). Magnitude of relationship between burnout and absenteeism : a preliminary study. *Psychological Reports* 103 : 465-8 .
33. Gil-Monte, P. R. (2012). Influence of guilt on the relationship between burnout and depression. *European Psychologist*. 17(3) : 231-6.
34. Hoffman, M.L. (1982), Development of prosocial motivation : empathy and guilt. in N. Eisenberg (coord.), *The Development of Prosocial Behavior*. London, Academic Press, 281-311.
35. İlhan MN, Durukan E, Taner E, Maral I, Bumin MA. (2008). Burnout and its correlates among nursing staff: questionnaire survey. *J Adv Nurs*. (2008) Jan;61(1):100-106. doi: 10.1111/j.1365-2648.2007.04476.x. Epub 2007 Nov 22. PMID: 18034813.
36. Izard, C. E. (1977). *Human emotions*, New York, Plenum Press.
37. Jones, WH., Schratte, AK., & Kugler, K. (2000). The Guilt Inventory. In *Psychol Rep*. 2000 Dec; 87(3 Pt 2):1039-42.
38. La chambre, V., & Marquet, C. (2008). Le travail de deuil du soignant en oncologie pédiatrique. *CNDR Soins Palliatifs - Centre National de Ressources Soins Palliatifs*
39. Larivey, M. (2002), *La puissance des émotions, Comment distinguer les bonnes des mauvaises*. Editeur : Pocket, Collection : Pocket. Pages : 376 pages
40. Lavoisier-Mérieux, L. M. (2002). De l'efficacité des stratégies de communication publicitaires menaçantes : une étude de la relation entre émotions négatives et persuasion dans le domaine de la lutte contre l'insécurité routière. *Actes du 2ème Congrès International des Tendances du Marketing*, Paris
41. Le Goff, J. P. (2006). Evaluation, l'intériorisation des normes. *Revue Projet* 2006/2 (n° 291), Pp 67 à 72. Éditeur : C.E.R.A.S
42. Lert, F., Marne, M.J., & Gueguen, A. (1993). Evolution des conditions de travail des infirmières des hôpitaux publics de 1980 à 1990. *Rev Epidemiol Saute Publ* 41:16-29.
43. Macaulay, J., & Berkowitz, L. (1970). Altruism and helping behavior – Social psychological studies of some antecedents and consequences. New York, Academic Press, 163-177.

44. Maslach, C. (1982). *Burnout The Cost of Caring*. Englewood Cliffs: Prentice Hall. 192 p.
45. Mihaescu G. (2006). *Réflexions sur la culpabilité dans la psychopathologie*, Paris, ILV.
46. Phaneuf, M. (2014). *Qualité de vie au travail ou qualité des soins - faut-il vraiment faire un choix?*. <http://www.prendresoin.org/wp-content/uploads/2014/09/Qualite-de-vie-au-travail-ou-qualite-des-soins.pdf>
47. Pinto, M. B., & Priest, S. (1991). Guilt appeals in advertising: An exploratory study. *Psychological Reports*, 69, 375-385
48. Rawlings, E.I. (1970). Reactive guilt and anticipatory guilt. in altruistic behavior, in J. Macaulay et L. Berkowitz (coord.), *Altruism and helping behavior – Social psychological studies of some antecedents and consequences*, New York, Academic Press, 163-177.
49. Saada, B., Maubon, M., & Nectoux L, M . (2011). *Mort des patients, professionnels en deuil ?*. *Responsabilité*. 12/2011, vol. 11, n° 44, Pp. 29-31.
50. Société canadienne de la SLA. (1995). *Faire face au deuil, Stratégies destinées aux personnes aux prises avec la SLA*.
51. Société canadienne de psychologie. (2014). Série « La psychologie peut vous aider » : *L'état de stress post-traumatique*, Ottawa (Ontario) K1P 5J3.
52. Tangney, J. P. & Ronda, La D. (2003). *Shame and Guilt*. HARD COVER PAPER BACK. 272 Pages.
53. Thalmann, Y. A. (2008). *Au diable la culpabilité*. Editeur Jouvence.
54. Vermeiren E (2010). *Le burn-out chez les soignants et dans les équipes*. *Urgences*, communication présentée au 4^e congrès de la société française de Médecine d'Urgence Paris Accès le 20 juin 2011, http://www.sfm.org/urgences2012/urgences2010/donnees/fs-recherche/fs_009_vermeiren.htm (dernier accès le 10 juin 2012)



The Prevalence, Causes And Effects Of Drug Use And Abuse On Performance Indicators Among Secondary School Students In Teso South Constituency, Kenya

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Abstract

The use of drugs has become more rampant today than at any other time. In learning institutions, especially secondary schools, the use of drugs has resulted in poor concentration in classwork, high rate of absenteeism and failure in exams leading to poor academic performance. The purpose of this study therefore was to: establish the prevalence of drug use among students in Teso South Constituency, establish the causes of drug use and identify the effects of drug use on academic performance indicators among secondary school students in Teso South Constituency. The constituency has a total of 25 public secondary schools with a total of 8023 students. Krejcie and Morgan's formula was used to select 192 students and data was collected from the field using questionnaires and later analyzed using percentages. Results indicate that 54.7%, 22.4%, 6.7%, 4.7% 4.2%, 3.1% of the students use Tobacco, Miraa, Cocaine, Tranquilizers, Kuber and Marijuana respectively. Also, the most influential causes of drug abuse among them were Peer influence at 90.1%, family background at 57.1% and availability of drugs at 30.8%. Lastly, 89.6% of the students had poor grades due to drug abuse alongside 78.6% of them affected by low concentration span and lack of interest in studies. The study, therefore, inferred that there is a high of drug ab prevalence use amongst secondary school students with family, peers as well as availability contributing to the onset of drug abuse.

The study concluded that drug abuse interferes with academic performance indicators of secondary school students in Teso South Constituency.

Keywords: Drug Use, Drug Abuse, Academic Performance Indicators, Secondary School Students

Introduction

There is an overwhelming outcry throughout the world today over the rapid growth of youths using drugs that the law prohibits. Drugs are chemical substances that modify mental, emotional and behavioral functioning (Goode, 1989). The extent of drug use has been identified as one of the greatest problems in educational institutions. This impacts the various aspects of learning such as students' discipline and interest in learning hence affecting academic performance.

According to the World Drug report (2005), the consumption of illicit drugs has tremendously increased throughout the recent years. The report further states that a major World trend is the increasing availability of many kinds of drugs. A report released by United Nations Drugs Control Programme (2004) indicated clearly that 4.8% of the global population consumes drugs and alcohol, but the worrying fact is that those hooked are the youth still in secondary schools.

Africa, over the recent years, has experienced a rise in the production, distribution and consumption of drugs among the youth with young adults being the majority victims (Asuni & Pela, 1986). Among all the continents, it is noted that Africa has a huge percentage of young and vulnerable population which has become the target market for the illicit drug industry. This constitutes 56% of the population aged between 14-19 years, which is the age of secondary school going students. In Ethiopia it is reported that 82% of the street children in Addis Ababa are involved in consumption of one drug or another (United Nations, 2013).

According to the United Nations (UN) (2013) statistics, 37,000 people in Africa die annually from diseases associated with drug abuse and the UN also estimates that there are 28 million drug users in Africa. An International conference on drug abuse in Kampala in 2013 reported that young people in high drug consumption countries were the most vulnerable section of the population, especially those in the period of early and late adolescence who are mostly unable to resist peer pressure and prone to experimenting with drugs in schools or even outside school.

In Kenya, a report by NACADA (2010) posits that drug and alcohol use has become prevalent more than at any other time. The report adds that majority of the users are students in secondary schools, tertiary colleges and

universities. In the past, the actual existence of drug use as a social problem was rare because of strong social structures. Notably, the low levels or nonexistence of drug use was sustained as a result of strong kinship ties that ran through different social institutions in Africa. This was enhanced by the traditions and taboos which were upheld to discourage the misuse of drugs. With the weakening of the traditional fabric of the society, drug abuse has permeated the education sector in a detrimental way.

Subsequently, drug misuse and abuse has consequential repercussions such as failure to keep up with the academic responsibilities. According to The National Institute on Alcohol and Alcoholism (2005) the United States of America has about 25% of students experiencing difficulty in academics due to drug use. Such difficulties include earning low grades, doing poorly on tests, missing class and falling behind in academic performance. Even students who do not use drugs may suffer academically as a result of their peers taking drugs. Conclusively, drug abuse undermines the academic mission of schools, colleges and universities. Drug use and its effect on students' performance can, therefore, lead to a decline in the overall academic performance of students and as a result, schools may face declining student retention rates and end up with poor reputation.

Statement of the Problem

There has been a significant drop in the academic performance among secondary school students in Teso South Constituency in recent years. For the last 3 years, less than 20% of the students enrolled for K.C.S.E examination in this constituency have secured admission to the public and private universities. This has raised a lot of concern among the education stakeholders. As previous literature intimates, drug and alcohol abuse are among the major factors leading to poor academic performance among secondary school students. Therefore, this study seeks to investigate the influence of drug use on academic performance indicators among secondary school students in Teso South constituency.

The study objectives were to:

1. Establish the prevalence of drug abuse among secondary school students of Teso South Constituency
2. Establish the causes of drug abuse among secondary school students in Teso South Constituency
3. Identify the effects of drug use on academic performance indicators among secondary school students Teso South Constituency

Prevalence of Drug Abuse

The World Health Organization (WHO) (2004) has given a worldwide global status report on alcohol and drug consumption. It gave an estimated figure of two billion people who were involved in drug consumption. Similarly, a report released by United Nations Drugs Control Programme (2004) expressed that 4.8% of the global population consume drugs, but the worrying fact is that those hooked are the youth. For instance, in America, the prevalence of drinking is 39.7 % among 12-20 year olds while 7.0 million people (18.5%) in the 12-20 age bracket reported drinking alcohol in the past one month (NSDUH, 2019).

In Africa, the survey conducted in Zambia revealed overwhelming evidence indicating the extensive consumption of alcohol. According to the Zambia Demographic Health Survey report (2008), it was revealed that 76% of men and women consume alcohol. The authors of the survey report noted that alcohol consumption varies with age and gender. From a different perspective, in Egypt, drug abuse, in particular heroine, is becoming a serious problem where around 6% of sampled secondary school students admitted to have experimented with drugs. Umaru, Sambo and Abdulwahid (2014) in their study in Nigeria also pointed out that one third of the students were smoking cigarettes while in Kenya today drug use has become prevalent than at any other times (NACADA, 2010). NACADA (2010) report adds that majority of the drug users are students in secondary schools, tertiary colleges and universities. Moreover, the report alludes that the use of the drugs has spread at a fast rate and reached every part of the country with the report showing that 5.3% of females and 22% of males aged between 15-19 years are involved in drug abuse.

According to a National Baseline survey carried out by the NACADA (2012) and the Ministry of Education (MOEST) (2012), drugs and substances used for the first time by students in both primary and secondary schools across the Country include: Cigarettes and Bhang (4-20%), *Miraa* / Khat (7-30%), *Kuber* 6%, Cocaine and Heroin (2-3%). Data gathered from teachers in some selected schools indicate that learners carry alcoholic spirits, sometimes mixed with fruit juices, sweets, glucose, ice cream, tea and other drugs to school. This is taken during their free time or in between lessons, hence a generally drunken student body (MOEST, 2015).

A study done in sections of Murang'a and Kajiado Counties revealed an average prevalence of current alcohol abuse among high -school students at 37% with Murang'a having a prevalence of 38 % while Kajiado had 36% (Okwarah, 2017). Other studies that were conducted by Adan (2016) and Birhanu, Bisetegna and Woldeyohannes (2014) also pointed out that students consumed *Miraa* Alcohol, cigarretes, marijuana, cocaine amphetamines, glue, mandrax, inhalants and methaqualone.

These related previous literature sets the stage for a need to ascertain whether drug abuse could be the major factor affecting student academic performance in Teso South Constituency. Data on substance abuse amongst secondary school students should be collected every so often so as to determine trends of commonly abused drugs in a place such as Teso South Constituency, hence the need for this study.

Causes of Drug Abuse amongst Students

The causes of drug abuse can be at an individual, interpersonal, institutional, community and societal levels (Adan, 2016). When properly investigated, these causes can give an indication as to why a certain individual got involved in the use or abuse of drugs. The individual causes include personal characteristics like one's age, sex, level of education and knowledge (Tarter et al, 2003), which is also linked to an individual's inherited genetic aspects from parents with alcohol use problems (Kendler et al, 2000). It also includes aspects such as hostility, low self-esteem and difficulties in controlling impulsive behavior (Walton & Roberts, 2004).

The second level is the interpersonal domain which is linked with the adolescent's social interactions with friends, family and close relations. This also involves poor early childhood upbringing in the family due to poor family life circumstances (Barret & Turner, 2005). It also includes low parental discipline and poor parental monitoring. The third level of causes of drug abuse is the institutional level. At this level the school culture is the main factor that influences secondary school students' involvement in drug abuse.

The fourth level is the external environmental factors that may influence drinking. These include the availability of affordable alcohol and the concentration of drinking outlets in the area surrounding the school. In a place or country where the laws or regulations are relaxed the problem of alcohol use may continue. According to Spooner (2009), the above domains or levels do not operate in isolation. They are interrelated and their combination makes the drug abuse problem among adolescents a more complex one.

According to Birhanu et al (2014) who conducted their study in Ethiopia, substance abuse is correlated with poor academic performance, low perceived risk of substances and friends use of substances. In a related study Adan (2016) in a study of Drug abuse among secondary school students in Wajir Kenya, found that drug abuse was caused by peer pressure, lack of discipline, parental encouragement, lack of school policies on drug abuse and lack of parental guidance on drug abuse. These are key instances that provides

the dire need to apply the same investigative approach in Teso South constituency.

Effects of drug abuse on students' academic performance

Good academic performance always depends on a healthy mind and body. It is important therefore that the brain be in good working condition all the time. Drugs, especially addictive ones, affect the brain and nervous system as a whole. According to, National Institute on Alcohol and Alcoholism (2005) in United State of America about 25% of students experience difficulty in academics due to drug use. Such difficulties include earning low grades, doing poorly on tests, missing class and falling behind in academic performance.

In Africa, drug trafficking and consumption among students accounts for 26% of global participation (UNODC, 2004). There are secondary effects of drug abuse which include taking care of friends on drugs and being victims of assault which can affect school work of students who don't use drugs. These consequences can have dramatic end results. Subsequently, school administrators report that significant number of students who drop out of school do so because drugs interfere with their academics (Birhanu et al., 2014).

According to MOEST (2015) report, Kenya's Busia County has seven constituencies with the rate of drug and alcohol abuse quite alarming. Nambale constituency which is the neighbouring constituency to Teso South records averagely 10% of the students in form three and four as victims of drug abuse. The report adds that the academic performance in secondary level of schools within Busia county is generally above average, with many students scoring a C and above, except in Teso South Constituency, where 75% of the students in secondary school score above C, therefore recording a 60% failure. In Teso South constituency, the situation of drug abuse among secondary school students is the same. Gross impairment and decline in academic performance as a result of drug use is becoming rampant.

It is noted that drugs reduce number of hours a learner spends in studies (NACADA, 2012). Poor academic performance among secondary school students in this constituency has several indicators such as students failing in test, being absent in class, dropping out of school and poor grades. The student involved in drug abuse may, therefore, not reach her/his full potential and may use drugs later in life. It is believed that students who use drugs are likely to perform poorly. Furthermore, no research has ever been carried out on effects of drug abuse on academic performance indicators among secondary school students in Teso South Constituency, hence the need of this study.

Methods

Research Design

Descriptive survey method was used in this study. This type of research design is useful when collecting information about people's attitudes, habits and opinions (Orodho, 2009). According to Mugenda and Mugenda (1999) the descriptive survey design is the best method available to social scientists who are interested in collecting original data for the purposes of describing a population which is too large to observe directly. Both quantitative and qualitative techniques of data collection were used in the study.

Study Area

This research was conducted in Teso South Constituency, one of the seven constituencies in Busia County. Teso South Constituency covers an area of 299.6 square kilometers. It is mainly occupied by the Iteso community, one of the plain Nilotic ethnic groups in Kenya. Teso South Constituency experiences a cool climate with an average temperature of 22⁰c and rainfall of 750mm – 1800mm annually, the soil here is loam black and fertile; hence the main economic activity here is Agriculture, KNBS, (2015). The area recorded perennial poor performance in KCSE exams in Busia County in recent years.

Target Population

Since the focus of this study was to investigate the trend of drug abuse by school going adolescents, the study population consisted of 25 public secondary schools. The target population of 8023 students were from those schools.

Sample and Sampling Procedure

Krejcie and Morgan's (1970) formula was used to get a sample size of 192 students. Simple random sampling was used to select the 192 students.

Research instruments

The researchers used questionnaires for data collection. The questionnaires were administered to the students which enabled the researchers to collect large amounts of data at once (See Appendix 1).

Pilot study

Before visiting the sampled schools for data collection, the researcher conducted a pre-testing of the questionnaires using two schools in the Constituency which were not part of the final sample. The aim of the pilot study was to not only to determine accuracy, clarity and suitability of the research instrument but also to check its validity.

Validity and Reliability of instruments

Validity is the degree to which results obtained from the data analysis actually represent the phenomenon under study. Content validity was ascertained with the help of the supervisor. Reliability refers to a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2009). Test retest was conducted, getting a reliability coefficient of 0.70 on the research instruments.

Data collection procedure

Questionnaires were prepared and distributed to the sampled 192 students. The questionnaires were collected immediately on completion. The collected data was then stored for analysis. The questionnaires did not have any slot for the name to assure anonymity in the sourcing of information as well as to maintain high sense of integrity.

Data Analysis Procedure

Once data was obtained from the field it was arranged and grouped according to relevant research questions, then summarized using frequencies, and percentages. This was done with the help of SPSS software.

Ethical considerations

Ethical issues are an integral part of the research planning and implementation process. Ethics in research refers to a code of conduct or expected social norm of behaviour while conducting research. The researcher ensured great care was taken to protect the research participants. In the first place, the full purpose of the research was explained to the participants, allowing them to choose whether to participate or not. Participants were assured of confidentiality of all that they would report in the study.

Results

Table 1. Prevalence of drug abuse in secondary schools in Teso South Constituency

Commonly abused drugs by students	Frequency	Percentage
Alcohol	105	54.7
<i>Miraa</i>	13	6.7
Marijuana	6	3.1
Cocaine	9	4.7
Tranquilizers	8	4.2
<i>Kuber</i>	8	4.2
Tobacco	43	22.4
Total	192	100.0

From Table 1 it is evident that there is high rate of drug abuse among students in Teso South Constituency. 54.7% of the students take alcohol while 22.4% take tobacco. From the table it is evident that students in Teso South Constituency have engaged in consuming seven different types of drugs. This shows that they abuse a wide variety of drugs. These results are in agreement with NSDUH (2019) who also found prevalence rates of alcohol use of 39.7% among 12-20 year olds. The prevalence rates are also in agreement with MOEST (2012) who found that cigarettes and Bhang were smoked by 4-20%, *miraa* was chewed by 7 – 30 %, *Kuber* 6 % and cocaine and heroin 2-3 %. With regard to the variety of drugs, these results are in agreement with Birhanu et al. (2014) who also found that students consumed *miraa*, alcohol, cigarettes, marijuana and cocaine.

Table 2. Factors that cause the students to abuse drugs

Factors that cause the students to abuse drugs	Less influential		Very influential	
	Frequency	Percentage	Frequency	Percentage
Mass media	168	92.3	14	7.7%
Family background	78	42.9	104	57.1%
Availability	126	69.2	56	30.8%
Peer influence	18	9.9	164	90.1%
Others	178	97.8	4	2.2%

These study findings summarized in Table 2 indicate that peer influence and family background are the most influential causes of drug abuse among students in Teso South Constituency as expressed by a percentage of 90.1% and 57.1 % respectively. 30.8% of the students agreed that availability of drugs exacerbates drug abuse among students while only 7.7% feel that mass media causes drug abuse among students.

These findings suggest that majority of the students agreed that peer influence, family background and availability of drugs are the leading causes of drug abuse among secondary school students in Teso South Constituency. This is in agreement with the study carried out by NACADA (2012) on rapid assessment of the status of drug and substance abuse in Kenya, which established that peer influence and availability of drugs were the major factors fueling drug abuse among the youths in Kenya.

The last objective sought to establish the effects of drug use on performance indicators of students. The students were expected to rank each effect as very severe, moderately severe, less severe or not severe at all. The results are summarized in table 3:

Table 3. Effects of drug abuse on the students in secondary schools

	LESS SEVERE		VERY SEVERE	
	Frequency	Percentage	Frequency	Percentage
Poor relationship with others	165	90.7%	17	9.3%
Low concentration span	39	21.4%	143	78.6%
Poor grades	19	10.4%	163	89.6%
School dropouts	95	52.2%	87	47.8%
Lack of interest in studies	44	24.2%	138	75.8%

The study found out that there was a great effect of drug abuse on students' performance. It is noted that 163 students representing 89.6% agreed that drug abuse caused poor grades among students in secondary school in Teso South Constituency, in comparison to 19 students representing 10.4% who disagreed. 78.6% of the students pointed out that drug abuse affected the students' concentration span in class, leading to a decrease in concentration ability in class. This is quite a high number compared to 39 (21.4%), who disagreed that there was no effect of drug abuse in students' concentration span in class. These findings are in agreement with the results found by Abot, (2005) who carried out a survey of how drugs affect the students' concentration span, which is further drastically reduced, setting in boredom.

The study also revealed that drug abuse causes lack of interest in studies among students. This is evident from Table 3 which indicates that 138 (75.8%) students who have abused drugs have experienced a decline of interest in schooling and feel that studies have no meaning in their life. Only 44 (24.2%) students disagreed to this, citing that there was no effect of drug abuse on the students' interest in learning. Also, according to the findings of the study, only 17(9.3%) agreed that drug abuse had a negative effect on the students' relationship with others compared to 165 (90.7%) who disagreed that drug use causes poor relationship among students.

Generally, these study findings reveal that there were negative effects of drug abuse on overall academic performance indicators among students in the schools. This is in agreement with United Nations, (2005) view that cognitive and behavioral problems experienced by drug-using youths may interfere with their academic performance and also present obstacles to learning.

Conclusions

The study concluded that there is a high prevalence of drug abuse amongst secondary school students in Teso South Constituency. It was also noted that family and peers contributed to the onset of drug abuse and that drug abuse interferes with performance indicators of secondary school students.

Recommendations

This study avers that the school administration employ measures in line with NACADA recommendations to curb drug abuse in schools. The study recommends that tackling drug abuse requires a three pronged approach whereby the family, peers and the community are all brought on board and that secondary school students focus on their studies and stop abusing drugs.

References:

1. Abot, I. (2005). Substance Use among Students and Out Of School Youth in Urban Area of Nigeria. W.H.O. Geneva
2. Adan, M. A. (2016). Drug Abuse in Public Secondary Schools: Causes, Effects and Interventions in Wajir East District, Wajir County, Kenya. Unpublished Masters Thesis Kenyatta University.
3. Asuni T. and Pela O. (1986). Drug Abuse in Africa. Bulletin of Narcotics 38 (1,2) 56-60
4. Barrett A. E., and Turner R. J. (2006). Family Structure and Substance use Problems in Adolescence and early adulthood examining explanations for the relationship. *Addiction* 101(1) 109-120.
5. Goode, E. (1989) *Drugs in American Society*. New York McGrawhill.
6. Kenya National Bureau of Statistics, (2015). Kenya National Bureau of Statistics.
7. Kendler K. S., Ohlsson H., Sundquist K., and Sundquist J. (2015). The causes of parent offspring transmission of Drug abuse: A Swedish population based study. *Psychol Med* 45(1): 87-95
8. Krejcie, R.V., and Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 1970 (30), 607 – 610.
9. Mugenda, O. M. and Mugenda, A. G. (2009) *Research Methods: Qualitative and Quantitative Approaches* (Revised edition) Nairobi: Acts Press.
10. MOEST (2012). District Education Officer, Teso South Sub County. Annual report.
11. MOEST (2015). District Education Officer, Teso South Sub County. Annual report.
12. NACADA (2004). *Youth in Peril: Alcohol and Drug use in Kenya*. Nairobi, NACADA
13. NACADA (2010). *Drug and Substance Abuse in Kenya*: Nairobi: NACADA.
14. NACADA (2012). *Drug and substance abuse: The Kenyan context*. Nairobi, NACADA

15. NSDUH (2019) National Survey on Drug use and Health. Table7.16B – Alcohol use in Lifetime, Past year and Past month among persons aged 12 to 20 by Gender: Percentages, 2002 – 2019.
16. Okwarah, P. O. (2017). Prevalence and correlates of alcohol use among underage high-school students in Murang'a and Kajiado Counties, Jomo Kenyatta University of Agriculture and Technology , Juja, Kenya
17. Orodho, J. (2009). Elements of education and social science. Research methods. Kenezja Publishers, Maseno, Kenya.
18. Spooner C. (2009) Causes and correlates of adolescent drug abuse and implications for treatment. Drug and Alcohol Review vol 18, Issue 4 pp 453-475
19. Umaru Y, MIA, O,O, Sambo, S and Abdulwahid, U (2014) The effect of cognitive restructuring intervention on tobacco smoking among adolescents in senior secondary schools in Zaria Kaduna State, Nigeria. European Scientific Journal, ESJ, 10 (5) 327 – 336
20. UNDOC (2004). Global Illicit Drug Trend. New York: United States.
21. United Nations, (2005). World Drug Report. New York: Oxford University Press.
22. United Nations (2013). World Drug Report. New York: Oxford University Press.
23. Walton, K. E., & Roberts, B. W. (2004). On the relationship between substance use and personality traits: Abstainers are not maladjusted. Journal of Research in Personality, 38(6), 515–535. <https://doi.org/10.1016/j.jrp.2004.01.002>
24. World Drug Report (2005). Drug statistic vol.2. Oxford University Press.

Appendix I: Questionnaire for students

PART A: General Information (Tick using (√) appropriately)

1. What is your gender? Female Male
2. How old are you? _____ years
3. Have you ever used drugs other than for medical purposes?
Yes No
4. If yes, for how long have you used them?
1 year 2-3 years More than years
5. What is your parents' education level?
Father _____
Mother _____

PART B:

6. Commonly abused drugs (Please tick the substances that you have used)

- i. Alcohol
- ii. Miraa
- iii. Marijuana
- iv. Cocaine
- v. Tranquilizers
- vi. Others _____

- vii. None

7. To what extent did the following factors cause you to abuse drugs?

Factors	Very influential 4	Influential 3	Less influential 2	Not influential 1
Family background				
Availability of drugs				
Peer pressure				
Frustrations				
Mass media				
Parents' status				

8. How widespread is drug abuse in your school?

9. To what extent do the following effects of drug abuse affect you?

Effects	Severe	Moderate	Less severe	No effects
Lack of interest in studying				
Low concentration span				
Poor relationship with other students				
Poor grades				



ESJ Social Sciences

The Impact Of The Question-Driven Technique On Developing Efl Jordanian Seventh Graders' Grammatical Competence

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Abstract

This research paper is aimed to examine the impact of the question-driven technique on developing EFL Jordanian seventh graders' grammatical competence. To this end, the researcher has redesigned the targeted grammatical material and constructed a grammar test focusing mainly on those grammatical themes given in the seventh grade textbook. The researcher has selected two sections (A & B) of the seventh grade; section A was assigned as a control group, the other one was assigned as an experimental group. The results of the study revealed that the students who have been taught inductively through the Questioning technique had gained better scores than those who have been taught deductively. It has also shown that the majority of the experimental group had more willingness and desire to participate in the class discussion. Also, it can be noticed that the use of the questioning technique is suitable for all types of learning styles and proficiency levels. Another important aspect to which the results of this study could be attributed is the adequate number of opportunities given for students to practice the targeted grammatical rules. In this regard, it sounds important to raise the strong effect of the scaffolding and modelling strategies in facilitating and easing the implementation of the questioning technique while teaching grammar.

Keywords: Question-Driven Technique, Seventh Graders, Inductive Methodology, Grammatical Competence

Introduction

Learning a foreign language is exactly like constructing a building. As blocks and bricks are considered the cornerstones to construct a building, structures and rules are also regarded as the backbone for learning any foreign language. In this regard, it is vitally important for teachers of English as a foreign language (EFL) to be knowledgeable not only of the different structures and forms but rather of the modern methodologies to be capable of teaching any target language professionally. Before expecting a higher level of linguistic product from EFL students, it is very critical to paving the way by starting with accuracy-based instruction. Despite giving accuracy a priority in this stage, this does not contradict with the premise of language skills integration, especially using modern and effective instructional methodologies.

According to many researchers (Canale & Swain, 1980; Omaggio, 2001), communicative competence consists of three pillars; grammatical competence, sociolinguistic competence, and strategic competence. The significance of grammatical competence resides in its invaluable role in enabling EFL learners to formulate meaningful and correct sentences and utterances. This means that the focus of this competency is not merely on accuracy but rather on fluency (Ellis, 2008; Ur, 2012). However, having a satisfying level of grammatical competence plays a pivotal role in EFL learner's learning cycle process since it helps them to overcome not only the verbal communication challenges but also those non-verbal communication problems. Thus, learning a foreign language requires both gaining a sufficient understanding of language grammar and using that language communicatively (Fitriati, Isfara, and Trisanti, 2017).

Statement of the Problem

In spite of this recognition and admission of the significance of the Grammatical competence in setting the scene for learning and acquiring foreign and second languages, there are still some setbacks and shortcomings that hinder the EFL learning process, especially the instructional methodology followed by many EFL teachers. In other words, like other macro language skills (listening, speaking, reading, and writing), teaching grammar as a micro-language skill is oftentimes taught abstractly and intangibly.

In contrary to the deductive methodology which goes hand in hand with the top-down approach where EFL teachers begin their Grammar lessons with the rules as a first step leaving no room for students to think moving on to the second step by giving examples about the target rules and finally ending the lesson with some quick exercises, the inductive methodology harmonizes with the bottom-up approach where EFL teachers do not follow the same steps followed above but rather they try to provide students with as much exposure

to the target language as possible (Mallia, 2014). In other words, what weakens the deductive methodology is the style practiced by EFL teachers in terms of time, focus, and presentation. That is to say, the teacher is still a sage on the stage i.e., the teacher occupies most of the class time giving very little time for students to use and practice the target language.

Significance of the Study

For the sake of bridging the existing gap between what is supposed to be practiced on the ground by EFL teachers and those flexible and effective teaching principles stipulated by several scholars such as shifting from sage on the stage to guide by the side for McWilliam (2009), from deductive –based instruction to inductive-based instruction, from 20/80 (teacher-centered) to 80/20 (student-centered) and from theory to practice, the researcher will address the grammatical competence that learners are supposed to master taking into consideration the aforementioned principles particularly by using one of the inductive methodology techniques (the question-driven). To be more accurate, the researcher is going to examine the impact of the question-driven technique on improving the seventh graders' grammatical competence, particularly past simple and continuous, present simple and continuous, and finally comparative and superlative.

EFL teachers who follow the inductive methodology have special ways of dealing with the target grammar themes, for example, they may use games, songs, stories, questions, dialogues or conversations. In contrast to the deductive methodology which has been delineated by Crystal (2003) as rule-oriented, the different modes of the inductive methodology are implicit-based and bottom-up as they focus on meaning and context. According to Wilson and Smetana (2011), learners are supposed to be familiar with the scaffolding and modelling strategy in order to extract the rules on their own.

Besides, the encouragement to use the inductive methodology has been spotted in several studies by many researchers such as (Benitez-Correa, Gonzalez-Torres, Ochoa-Cueva, & Vargas-Saritama 2019; Dang and Nguyen, 2012; Nalunga, 2017). For these researchers, the inductive approach has proved its effectiveness in varied EFL contexts especially for teaching grammar. For example, Benitez-Correa, et.al, (2019) have found out that the inductive approach does not only affect students' proficiency level but rather it does strengthen the relationship between students and their teachers through those flexible and appealing inductive approach techniques.

This subconscious exposure to the target language has been clarified by Krashen (1981) in his renowned theory "second language acquisition" in which EFL learners are expected to be exposed to multi meaningful contexts to practice the interaction and communication skills. Furthermore, Krashen and Terrell (1983), emphasized the necessity of the comprehensible input

hypothesis for language acquisition occurrence. According to this hypothesis, the input should match the proficiency level of the target students, i.e., it should not be very difficult in order not to discourage students or very easy to kill the spirit of competitiveness. This hypothesis, indeed, supports the natural progress of language because it is learner-centered not like the Grammar translation which is teacher-centered.

Operational Definitions

Question-driven technique is one of the models of the inductive methodology that is based on providing students with sufficient opportunities to practice the target language meaningfully and authentically with the teacher's guidance and assistance. Unlike the deductive methodology which is teacher-centered, the inductive methodology, which is represented in this research study by the question-driven technique, is student-centered. According to Iannelli (2016), the questioning technique is used by EFL students to aid them in comprehension not only in one specific phase of learning but rather in all phases of learning. That is, it could be used in the pre-learning stage by activating the learners' schemata, in the while and post-learning stages to facilitate understanding and to stretch out learning respectively. It does not stop at that edge but it could be used by the end of the lesson to check, evaluate and assess students' learning and this is what is known as Assessment of learning".

Inductive Methodology is an instructional methodology used by EFL teachers to develop students' proficiency level in the English language by:

- 1- increasing the dose of exposure to the target language;
- 2- activating the role of students by increasing their interaction and participation in the classroom;
- 3- providing students with ample meaningful opportunities to practice the target language
- 4- changing the classroom atmosphere from the static model into a more flexible and appealing one.

To achieve these objectives, there are different techniques and forms through which EFL teachers can successfully implement the inductive methodology such as games, stories, questioning and dialogues.

Grammatical competence is the ability of the seventh graders to use the grammatical themes given in Grade seven communicatively and meaningfully. These themes are "present simple and continuous, past simple and continuous, and comparative and superlative". This competence has been measured in this study through a written achievement-test constructed by the researcher. In this study, the target Grammar competency means the set of rules that allow EFL learners to combine words in their language to come up with larger units of oral and written speech. Ur (1988) asserted that "there is

no doubt that a knowledge – implicit or explicit – of grammatical rules is essential for mastery of a language: you cannot use words unless you know how they should be put together ” (p. 4).

Literature Review

Undoubtedly, the use of the questioning technique has been used in different fields of science for a long time. For example, the ancient Greek philosopher "Socrates" and Einstein are considered pioneers in this regard. They used to ask their students questions instead of giving direct information or responses (Filiz, 2009). It has been historically proved that the questioning strategies have a strong ability in provoking students' curiosity, problem-solving, critical-thinking skills, and recalling information. To do so, EFL teachers should change their role to be guides by the side to engage students and facilitate their learning (Dillon, 1990).

In one of her famous working hypotheses, Omaggio (2001) focused on the necessity of providing EFL students with ample opportunities (sufficient exposure) to practise the target language meaningfully and authentically. Accordingly, the use of the question-driven technique as one of the forms of the inductive methodology has been chosen for the sake of changing the learning and teaching atmosphere and shifting the roles of both teachers and students to fulfill the modern orientation of pedagogy represented by the principles that have been already mentioned. This means that asking students proper questions can foster interaction and understanding between the teacher and their students (Van Lier, 1988).

In his research paper entitled, "Teaching Grammar in Context: Why and How?", Mart (2013) explained the reason and the proper mechanism of introducing Grammar to EFL learners. For him, the best way to do so is by teaching grammar in context, especially by using dialogues. The use of dialogues as one of the indirect forms of teaching grammar is useful because it shows the learners how language is used in real-life situations (Thornbury, 1999). By having a look at those dialogues, one can easily notice that the major constituent of these dialogues is the use of questions. According to Mart, genuine conversations are considered an excellent means to facilitate EFL learners' apprehending the targeted grammatical themes. By the end of his study, he concluded saying that teaching grammar in context will help learners to acquire new structures and forms and that Learners will be ready to use grammatical conventions more effectively in communications if they are exposed to them in context.

Regarding the possibility of the questioning technique in developing higher thinking skills, Etemadzadeha, Seifi, and Far (2012) asserted that the questioning technique is very powerful in provoking students' interest and desire to think and write. They found out that using the questioning technique

does not only motivate students to develop their critical thinking but rather it leads them to be more active in producing language, including speaking and mostly writing, since it is believed that good writing results from good thinking.

Moreover, Wilson and Smetana (2011) proposed a questioning technique entitled "Question as thinking" to be used within the classroom. It is a mix of both questioning and thinking aloud for the sake of gaining comprehension from the given text. They believe that such a technique guides students through their learning step by step enabling them to be more autonomous and confident. They concluded that having the ability to use the questioning technique as a thinking tool on their own, students are expected to have no problem in dealing with any text regardless of the difficulty level it may have due to the progress of their metacognitive faculty. For them, the use of such a technique cannot be successfully carried out in contexts that have passive learners.

According to a research study conducted by Khotimah (2017) in which she examined the effect of questioning techniques on students' ability in writing narrative texts, the researcher found out that there was a significant difference in the students' ability in writing narrative texts attributed to the use of the questioning technique. The results of the study have also shown that the students' English competence especially in writing was getting better by implementing the questioning technique recommending EFL teachers to activate the use of the questioning technique to enhance the students' ability in writing.

In another study conducted by Fitriati, Isfara, and Trisanti (2017) in which they examined the influence of the EFL teachers' questioning skills on enhancing EFL secondary school students' verbal responses, the study has shown that teachers' questioning skills are crucial to successfully make students more engaged in the classroom interaction, enhance students' verbal responses, and lead to the comprehension of the lesson suggesting that teachers should be more aware of their questioning skills to assist students to achieve better proficiency in the English language.

Alzu'bi (2014) conducted a comparative study to investigate the effectiveness of teaching English grammar by using deductive and inductive teaching models. The researcher designed two programs based on inductive and deductive methods. The results of his study revealed that there were significant statistical differences at ($\alpha \leq 0.09$) among the grammar performance means of both groups at both levels in favour of the inductive method. On the other hand, in a comparative analysis of the inductive and the deductive methods in teaching English conducted by Farahani (2018) by which the major purpose was to compare the efficiency of these two approaches in teaching English grammar by inspecting students' performance

implementing the test-teach-test design, the achieved scores in the tests indicated that both the inductive and the deductive methods were equal in terms of efficiency. These results came to support Muhammad & Jaber's study (2008) who concluded that there was no significant difference between the deductive and inductive approaches and there was no significant effect for the interaction between the approach and class.

In the same regard, Lafta (2019) conducted a study to examine the effect of deductive and Inductive Approaches on Iraqi EFL college students learning of grammar. For this purpose, two groups of students were taught the order of adjectives through deductive and inductive approaches and then they were given an identical exam to measure their understanding after the lesson. The results of the study indicated that there was a slightly higher level of achievement as well as a higher level of satisfaction in favor of the group which was taught deductively.

Methodology

Data Collection Technique

In order to examine the impact of the question-driven technique as one of the models of the inductive methodology on upgrading EFL Jordanian seventh graders' grammatical competence, the researcher has used a quasi-experimental design which requires an experimental group and a control group for comparison. To this end, the researcher has constructed a grammar test to be applied to both groups before and after the intervention (the treatment). The test has been validated before the execution process by a set of specialists and experts. The researcher has first redesigned the targeted grammatical material (see appendix 1) and then constructed a grammar test focusing mainly on those grammatical themes given in the seventh-grade textbook. The grammatical themes included present simple and continuous, past simple and continuous, comparative and superlative.

Findings

In light of the results of the study, particularly in Table 1, one can notice that there is a significant increase in the scores of those students who were taught deductively; this appeared between the grammar pre-test and the post-test. An increase has also been noticed between the pre- and post-test scores of the group that was taught inductively as shown in Table 2 below. In other words, we can conclude that at the time the development level in the deductive methodology moved from fair to good, it was better and more noticed in the inductive methodology going from fair to very good.

Table 1. Deductive methodology group

Statistic	Pre-test	Post-test
Mean	3.514	5.750
Standard Deviation	0.661	0.941

$$t = 8.2395$$

$$p < 0.0001$$

Table 2. Inductive methodology group

Statistic	Pre-test	Post-test
Mean	3.667	6.501
Standard Deviation	0.689	1.057

$$t = 10.0901$$

$$p < 0.0001$$

The initial results have also revealed that there has been no significant difference between the pre-test scores of both the deductive and inductive groups before the intervention which means that both groups have had a similar level of grammar competence. After the intervention, a significant difference in the post-test has been observed (see Table 3). The results of this study are in harmony with Khotimah's research results in which she found that the questioning technique has a positive impact on EFL students writing competency. In congruence with this, Fitriati, Isfara and Trisanti (2017) found out that the questioning skills have played a crucial role in enhancing EFL students' verbal responses. Benitez-Correa, et.al (2019) found out that the inductive approach especially the questioning technique does not only improve students' proficiency level but rather cementing the relationship between students and their teacher. This also confirms what has been demonstrated by many educators who believe in using the questioning technique as an engine to drive the entire learning and teaching process.

Table 3. Results of the post-test in the deductive and inductive groups

Statistic	Deductive	Inductive
Mean	5.750	6.501
Standard Deviation	0.941	1.057

$$t = 2.1998$$

$$p = 0.0349$$

Reflective Discussion of the Results

In light of the results of the pre-and post-test, it has been deduced that the students who have been taught inductively have gained better scores than those who have been taught deductively. Also, it has been noticed that the majority of the experimental group students have more willingness and desire to participate in the class discussion. This could be attributed to the comfort and safety given to students by their teacher who does not focus on every single grammar mistake or error committed by students in the class.

Another important aspect to which the results of this study could be attributed is the adequate number of opportunities given for students to practice the targeted grammatical rules. This was through those ready-made worksheets which were smartly and meaningfully designed for the sake of using the target language as much as possible and extracting the rules on their own. In this regard, it sounds important to raise the strong effect of the scaffolding and modelling strategies in facilitating and easing the implementation of the questioning technique while teaching grammar. This was cautiously addressed while preparing the worksheets. In other words, instead of focusing on one type of questions (wh-questions), it would be more beneficial to include the other type of questions (Yes, No / and Yes, No with options) to guarantee the participation of as many students as possible. (See appendix 1)

It was also noticed that high achieving students did not have any problem in dealing with wh-questions as a means to communicate with each other and to extract the rules whereas low achieving students were in need of Yes, No questions especially when they are accompanied with options as a means to increase their interaction and understanding. Unlike other strategies and techniques that may take a long time for students to be acquainted with, it has been observed that the students of the experimental group took a very short time in getting on with the questioning technique.

Luckily, in light of my random and systematic observations, it has been noticed that very few students (low achieving students) had some challenges in responding to wh-questions, therefore, a box of useful language for each grammar theme, including prompts, hints, and starters was prepared and distributed to students in need. Since the ultimate goal of using the questioning technique is to motivate students' fluency and linguistic competency, students' minor mistakes and errors have not been directly corrected. For example, I heard some students using some irregular verbs incorrectly especially in the past tense while talking about what they did in the morning before going to school, when they got to school, when they went back home, but I did not interrupt and correct them directly. Oftentimes, I gather as many mistakes and errors as possible in order to display them in the class to discuss them and to draw students' attention to those mistakes to avoid committing them in the future.

Based on the findings and the positive impacts of this study and other research studies, one can conclude that the questioning technique can be adapted to serve the EFL learners' needs not only in one particular language skill but rather in almost all language skills. Also, it can be noticed that the use of the questioning technique is suitable for all types of learning styles and proficiency levels. More importantly, the success of attaining such positive

results relies on having qualified staff who are capable of using such techniques and strategies professionally.

References:

1. Alzu'bi, M.A. (2015). Effectiveness of inductive and deductive methods in teaching grammar. *Australian International Academic Centre*, 6 (2), 187-194.
2. Benitez-Correa, C., Gonzalez-Torres, P., Ochoa-Cueva, C., & Vargas-Saritama, A. (2019). A Comparison between deductive and inductive approaches for teaching EFL grammar to high school students. *International Journal of Instruction*, 12(1), 225-236.
3. Canale, M. & Swain, M. (1980). *Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing: Applied Linguistics* (3rd ed.). Boston: Heinle.
4. Crystal, D. 2003. *The Cambridge Encyclopedia of the English Language*. (2nd ed.). Cambridge: Cambridge University Press.
5. Dang, T. & Nguyen, H.(2012). Direct Versus Indirect Explicit Methods of Enhancing EFL Students' English Grammatical Competence: A concept Checking Based Consciousness-Raising Tasks Model. *English Language Teaching*, 6(1), 112121.
6. Dillon, J. T. (1990). *The Practice of Questioning*, London, Routledge.
7. Ellis, R. 2008. *The study of Second Language Acquisition*. (2nd ed.). Oxford: Oxford University Press.
8. Filiz, S. (2009). Question and answer method to ask questions and technical information on the effects of teacher education. *Social Sciences Journal of Caucasus University*, 2 (9), 1167-1175.
9. Fitriati, S. W., Isfara, G. A. V., & Trisanti, N. (2017). Teachers' questioning strategies to elicit students' verbal responses in EFL classes at a secondary school. *International Journal of Global Education*, 1(8), 26-34.
10. Iannelli, R. (2016). "The effects on student understanding when questioning techniques are used during the reading of informational text". *Theses and Dissertations* . 574. <https://rdw.rowan.edu/etd/574>
11. Krashen, S., & Terrell T. (1983). *The Natural Approach: Language Acquisition in the Classroom*. Oxford: Pergamon.
12. Krashen, S. D. (1981). *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon.
13. Lafta, N. (2019). The Effect of Deductive and Inductive Approaches on Iraqi EFL College Students Learning of Grammar. *University of Thi-Qar Journal*, 14 (3), 55-66.
14. Mallia, J. G. (2014). Inductive and Deductive Approaches to Teaching English Grammar. *AWEJ Journal*, 5 (2), 221 -235.

15. Mohammed, A., & Jaber, H.(2008). The Effects of Deductive and Inductive Approaches of Teaching on Jordanian University Students' Use of the Active and Passive Voice in English. *College Student Journal*, 42(2), 545-553.
16. Omaggio, A.H. (2001). *Teaching Language in Context* (3rd ed.). Boston: Heinle.
17. Thornbury, S. (1999). *How to Teach Grammar*. Essex: Pearson Education Limited.
18. Ur, P. (2012). *A course of English language teaching*. Cambridge: Cambridge University Press.
19. Van Lier, L. (1988). *The Classroom and the Language Learner*. London: Longman.
20. Wilson, N., & Smetana, L. (2011). Questioning as thinking: A metacognitive framework to improve comprehension of expository text. *Literacy UKLA*, 45(2), 84-90.

Appendix 1

Re-designing the Grammatical Themes inductively in a Question-driven form

Instead of introducing the grammar activities according to what is stated in the Teacher's Book, the Student's Book, and the Activity Book, the researcher has redesigned those grammar activities and themes based on the Question-Driven Technique.

(This is a sample of both the original and the re-designed material of the grammar activities before and after modification)

Source: <https://moe.gov.jo/ar/node/79572>

Before modification

The Present Simple (affirmative)

Complete this paragraph with the verbs in the correct form.

Feel	be	like	work	have	be
------	----	------	------	------	----

Salma (1) is a nurse. She (2)-----at night.

Night, I (4)-----time to talk to Salma: I (3) ----- my job. At people. And people (5)----- they (6) ----- not alone.

After modification

Who is Salma? / Is Salma a nurse or a teacher?

When does Salma work? / Does Salma work in the day or at night?

Does Salma like her job? / Why does Salma like her job?

Does Salma have time to talk to people? When does she have time to talk to people?

How do patients in the hospital feel?/ Do patients in the hospital feel happy or sad?

Note: Please write your answers in full and complete forms

For further practice, students are invited to answer the following questions about themselves but after modelling this by their teacher.

My Daily Routine

When do you get up every day? / Do you get up early or late?

When do you pray Al-Fajr prayer? Do you pray on time or late?

Where do you pray ? Do you pray in the mosque or at home?

What do you do before going to school? Do you have your breakfast at home alone or with your family?

Do you practice some sport? Do you surf the net? Do you read the guidelines? Do you feel upset or relaxed in the morning?

How do you go to school? Do you go alone or with others?

How far is it from your home to school? Is it far or close?

How long do you stay at school? Do you feel bored or excited?

When do you go back home? Do you go back home late or early?

When do you have your lunch? Do you have lunch directly after getting home?

When do you do your homework? Do you do your homework after or before lunch?

What do you do before going to bed? Do you play video games , go walking, watch a movie, recite some verses from the Holy Qura'n, etc.?

After Modification (present simple with adverbs of frequency)

Always usually sometimes often never

In pairs, read the following questions about Global Warming and try to answer them based on your knowledge and experience. Students are urged to take turns asking and answering the questions and then to write the answers on their notebooks:

Do you fight global warming?

Do you turn off the water tap while brushing your teeth?

How often do you turn off the water tap while brushing your tap?

Do you walk to school or go by bus?

How often do you go to school on foot / by bus?

Does your family recycle paper cups and supermarket bags?

How often does your family recycle paper cups and supermarket bags?

Do you turn off the lights when you leave a room?

How often do you turn off the lights when you leave a room?

Do you turn off the computer when you don't use it?

How often do you turn off the computer when you don't use it?

Before Modification (Present simple)

Match the verbs with their opposite.

- | | |
|---------------|------------------|
| a. to slow | 1. to freeze |
| b. to heat up | 2. to accelerate |
| c. to warm | 3. to make cold |
| d. to melt | 4. to cool |

6 Fill in the blanks with six verbs from exercise 5.

The sun (1) _____ the air. Humid hot air rises and expands. Expansion (2) _____ the air and makes clouds and rain. The sun also (3) _____ up the Earth. As the Earth heats up, the ice in the Poles (4) _____. Pollution (5) _____ this process. We have to (6) _____ it down.

After Modification (present simple)

- What heats up the air? Does the sun heat or cool the air?
 What does expansion do? Does expansion cool or melt the air?
 What does the sun do to the Earth? Does the sun warm up or cool the Earth?
 What happens to the ice in the Poles when the Earth heats up?
 Does the ice in the Poles melt or freeze when the Earth heats up?
 Does pollution accelerate or decrease ice melting in the poles?
 What should we do to slow down pollution?

Useful prompts and hints

We can recycle: newspapers, white paper, mixed-colour paper, magazines, junk mail, plastic bags, milk bottles, juice bottles, water bottles

Go to school on foot, by bus / turn off the water tap when brushing teeth/ turn off the lights/ turn off the computer when we don't use it

We cannot recycle: yoghurt containers, rubber bands, plastic stickers, plastic food wraps, syrup bottles, nappies, bottle tops

(past simple)

Question-Based Games (Find someone who-----)

Note: Such an activity could be used at the beginning of the class as a kind of a warming-up activity to pave the way for students to be more active and to practice the targeted teaching point adequately.

#	Items	Name
1	ate Mansaf yesterday	
2	drank orange juice last week	
3	went to the child museum last summer holiday	
4	watched a movie last night	
5	wrote a story last year	
6	read a book last month	
7	travelled to another country	
8	visited the Dead Sea	

9	played video games yesterday	
10	fasted a day last month	

Note: To help students carry out such games easily and successfully, the teacher must provide students with sufficient and clear instructions about the game. He is also required to model the game in front of them to show them exactly how to implement it.

Before Modification

6 Rewrite the following sentences using the correct form of the verbs in bold.

1- Archaeologists who explore Jordan discover that it is a rich historical location.

In the last century, archaeologists who explored Jordan discovered that ...

2. Many people live in this area. ... during ancient times.

3. Citizens work hard on building their cities using materials which are available around them.

In the past, ...

4. The markets attract people from various locations.

Many years ago, ...

After Modification

Who explored Jordan?

What did they discover?

Did archaeologists discover that Jordan was a rich or poor location?

Did many people live in Jordan? When was this?

Who worked hard on building the Jordanian cities? What did citizens use to build their cities?

What attracted people from various locations?

Were people attracted by libraries or markets?

Before modification

Complete the passage with the correct form of these verbs.

Be live not change disappear be

The wonders of the ancient world were places where people (1) **lived**.

(2) **Were** there many wonderful locations in the past?

Yes, there (3) **was** a large number of historical places that were unique. Some of these wonders (4) **did not change** at all over the years, but some (5) **disappeared** after many years.

After Modification

Did people live in the wonders of the ancient world?

Were there many wonderful locations in the past?

Were historical places unique or normal?

Did these wonders change over the years?

Did some of these wonders or all the wonders disappear over the years?

Before modification

The Past Simple (irregular verbs)

1- In pairs, find the Past Simple forms of these irregular verbs in the texts on pages 55 and 56.

sit	take	think	give	make
-----	------	-------	------	------

2- Now in pairs, complete this dialogue with the verbs from the list. Two words are used more than once.

was	thought	were	became	wrote
-----	---------	------	--------	-------

The character Sherlock Holmes (1) was a professional detective. He (2) thought fame (3) was not important. Watson (4) wrote his stories for people to know Holmes' role in them. Holmes' tools (5) were science, logic and observation of small details. His techniques, such as examining fingerprints, later (6) became a reality in police investigations. Next time you are in London, visit his famous apartment at 221b Baker Street. It (7) became a museum in 1951.

After Modification

Who was Sherlock Holmes?

Was Sherlock Holmes a professional detective?

Did Sherlock Holmes think that fame was important ?

Why did Watson write his stories?

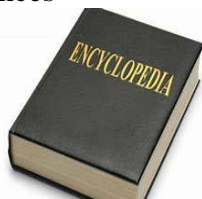
What were Holmes' tools?

Holmes used several tools in his career. Mention two of them.

One of Holmes' techniques became a reality in police investigations. What was that technique?

Before modification

Compare the two books in the photos. Use the adjectives in the list to write sentences



big	small	thick	famous	old	colourful
-----	-------	-------	--------	-----	-----------

Instructions: Read the questions below, then in pairs answer them giving full answers.

For example: "The encyclopedia is bigger than the story."

Which is bigger the encyclopedia or the story?
Which is smaller the encyclopedia or the story?
Which is thicker the encyclopedia or the story?
Which is more famous the encyclopedia or the story?
Which is older the encyclopedia or the story?
Which is more colourful the encyclopedia or the story?
After answering the questions above, the students are asked to take turns asking and answering the questions orally as a kind of extra practice.

Before modification

Complete this dialogue with the correct form of the adjectives in brackets.

Raed: I saw one of Poirot's stories on TV yesterday! Fatima: Poirot? I don't like him. I only love Miss Marple. Raed: Miss Marple! That boring old lady! Fatima: She's not boring. In any case, she's (1)----- (boring) than Poirot. Raed: She's (2) ----- (intelligent) than Sherlock Holmes. Holmes and Poirot are (3)----- (logical) and (4) ----- (professional) than Miss Marple. Fatima: Maybe, but she's (5)----- (old) and (6)----- (wise) than them. Raed: In any case, I like detective stories. They are (7)----- (interesting) than romantic novels.

After Modification

Based on the text above, answer the questions below in full forms:

For example: Miss Marple is less boring than Poirot.

Who is more boring Miss Marple or Poirot?
Who is less boring Miss Marple or Poirot?
Who is more intelligent Miss Marple or Sherlock Holmes?
Who is less intelligent Miss Marple or Sherlock Holmes?
Are Poirot and Holmes less or more professional than Miss Marple?
Is Miss Marple less or more professional than Poirot and Holmes?
Who is older Miss Marple or Poirot?
Who is wiser Miss Marple or Holmes?
Which is more interesting a detective story or a romantic novel?
Are detective stories more or less interesting than romantic novels?

Note: To provide students with more practice and to enable them to get more familiar with comparative and superlative forms, it is recommended to begin or end the class with the following activity:

Find someone in the class who is -----

#	Items	Names
1	taller than you	
2	more courageous than you	
3	more patient than you	

4	more intelligent than you	
5	less intelligent than you	
6	more logical than you	
7	less logical than you	
8	happier than you	

Note: When reporting the results to class, please follow the following sample as an example:
 Ahmad is taller than me this means that I am shorter than him.
 Samir is more courageous than me this means that I am less courageous than him.

Before modification

Complete the text by the new detective Sameer. Use the comparative form of the adjectives from the list.

Courageous	patient	logical	intelligent	hard
------------	---------	---------	-------------	------

Hello! I'm Sameer. I finally passed the test and became a real detective, but Joe didn't. It wasn't so easy; in fact, it was (1) _____ than we expected. I was (2) _____ than Joe and didn't give up thinking about the solutions of the different problems. The head detective said that I was (3) _____ than Joe since all the solutions I suggested made perfect sense. Although Joe is (4) _____ than I am, he couldn't solve all the problems. I think he was a bit scared of failing; I was (5) _____ than him and didn't care about the test results.

After modification

Based on the text above, answer the following questions:
 Was the test harder or easier than they expected?
 Who was more patient Sameer or Joe?
 Who was more logical Sameer or Joe? Support your answer with a piece of evidence from the text.
 Who is more intelligent Sameer or Joe?
 Who was more courageous Sameer or Joe? Support your answer with a piece of evidence from the text.

Before Modification

Complete this table with the superlative form of the adjectives.

Adjective	Comparative	Superlative
old	Older than	the oldest
pleasant	more pleasant than	the most pleasant
hot	Hotter than	-----
famous	more famous than	-----
good	Better than	-----

After modification

Who is the oldest in your family?

What is the hottest city in your country?

Who is the most famous person in your village?

Who is the best student in your class?

What is the worst game/ sport for you?



ESJ Social Sciences

Solidarité Associative Et Résilience Traumatique : Le Cas De l'Association Sénégalaise Des Victimes De Mines (ASVM)

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Résumé

En Casamance, la multiplication des accidents de mines antipersonnel et antichars dans le contexte du conflit armé a entraîné, chez les victimes, un état de vulnérabilité qui s'est exprimé à travers un affect traumatique. Cette situation a favorisé la mobilisation d'une dynamique d'assistance au centre de laquelle on trouve l'Association Sénégalaise des Victimes de Mines (ASVM). C'est donc le rôle de cette organisation dans la résilience des victimes de mines que cet article se propose d'analyser à travers une méthodologie exclusivement qualitative. Ainsi, grâce à la conduite d'entretiens réalisés avec vingt-sept (27) victimes de mines, deux responsables de l'ASVM et trois responsables au niveau des structures impliquées dans l'assistance aux victimes de mines, l'étude démontre que le recours à la solidarité associative a contribué à l'expression d'un soutien par les pairs. Ce soutien s'est avéré décisif dans la résilience des victimes de mines. Cet article qui se situe à la croisée de la sociologie des organisations et de la psychologie sociale, renouvelle notamment la pensée sur les dynamiques de solidarité associative. Ce faisant, il s'inscrit dans le champ thématique de la sociologie des organisations tout en contribuant à diversifier la réflexion sur le handicap.

Mots-clés: Victimes De Mines, Affect Traumatique, Solidarité Associative, Résilience Traumatique, ASVM, Casamance

Associative Solidarity And Traumatic Resilience: The Case Of The Senegalese Association Of Landmine Victims (ASVM)

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Abstract

In Casamance, the multiplication of landmine and anti-tank accidents in the context of the armed conflict has led to a state of vulnerability among the victims, which has been expressed through traumatic affect. This situation has led to the mobilization of a dynamic of assistance at the center of which is the Senegalese association of landmine victims (ASVM). It is therefore the role of this organization in the resilience of landmine victims that this article proposes to analyze through an exclusively qualitative methodology. Through interviews with twenty seven (27) landmine victims, two ASVM leaders, and three leaders of structures involved in assisting landmine victims, the study demonstrates that the use of associative solidarity has contributed to the expression of peer support. This support has proven to be decisive in the resilience of landmine victims. This article, which is at the crossroads of organizational sociology and social psychology, renews thinking on the dynamics of associative solidarity. In doing so, it is part of the thematic field of organizational sociology while contributing to the diversification of thinking on disability.

Key Words: Landmine Victims, Traumatic Affect, Associative Solidarity, Traumatic Resilience, ASVM, Casamance

Introduction

En Casamance, l'usage des mines antipersonnel et antichars comme armes de guerre dans le cadre du conflit armé, a favorisé la multiplication des accidents de mines. Ces accidents ont causé, en plus des préjudices physiques (troubles visuels, brûlures corporelles, blessures physiques, amputations des pieds et des mains), de lourds dommages psychologiques (Sène, 2020b). En effet, de par leur caractère brutal et l'étendue des préjudices physiques qu'ils ont causés, ces accidents ont été générateurs d'un affect traumatique qui s'est notamment exprimé, chez les victimes, par un sentiment de rupture identitaire, un sentiment de dégradation et un désespoir. Cet état traumatique a été à l'origine de la mise en œuvre d'une action d'assistance initiée par les pouvoirs publics sénégalais et des acteurs non gouvernementaux afin de réduire la vulnérabilité des victimes de mines (Sène, 2020a). Au cœur de cette dynamique d'assistance, l'Association Sénégalaise des Victimes de Mines

(ASVM) œuvre dans la réinsertion sociale des victimes de mines à travers l'activation d'une dynamique de solidarité associative. Celle-ci désigne le développement d'une solidarité interne dirigée vers les membres d'une association qui entretiennent entre eux une histoire ou un lien d'identité (Vermeersch, 2001). Ce lien crée ainsi une certaine familiarité entre membres et les amène à se sentir solidaires et à envisager l'entraide mutuellement (Duvoux, 2016). Cette forme de solidarité procède d'une dynamique de création d'un espace de connaissance et de reconnaissance (l'association) qui sert de levier pour développer un élan d'empathie en vers les membres les plus fragiles.

Le présent article s'intéresse à l'enjeu de la solidarité associative développée par l'ASVM dans la prise en charge de l'affect traumatique auquel les victimes de mines ont été confrontées. Il s'inscrit ainsi dans l'ancrage théorique de la psychologie sociale et de la sociologie des organisations. La méthodologie s'appuie sur le recueil de plusieurs témoignages qui rendent compte de la nature de l'affect traumatique tout en mettant en exergue les actions de solidarité entreprises par l'ASVM pour apporter aux victimes de mines un soutien psychosocial porteur de résilience traumatique, laquelle renvoie à la capacité des personnes victimes de traumatisme à s'adapter et à se rétablir avec succès. La présente étude est structurée en trois sections. La première présente le contexte et la problématique de l'étude alors que la deuxième et la troisième section portent successivement sur la méthodologie de recherche et la discussion des résultats.

Contexte et problématique de l'étude

Depuis qu'il a éclaté en 1982, le conflit armé en Casamance a engendré des conséquences désastreuses sur le plan socioéconomique. Ces conséquences ont été aggravées par la profusion des mines antipersonnel et antichars dont l'usage, comme armes de guerre, a débuté à partir de 1991 (Marut, 2010). Selon une étude sur l'impact des mines en Casamance (Handicap International, 2007), la prolifération des mines a atteint plus de 41 % du territoire régional de Ziguinchor. Elle a affecté l'activité de plus de 62 000 personnes, causant ainsi d'importants préjudices aux plans économique et social.

Au plan économique, elle a considérablement affecté le développement économique de la Casamance, notamment le secteur agricole (Marut, 2010). En effet, en raison de la présence des mines, les paysans des localités affectées n'ont plus accès ni à leurs rizières ni à leurs plantations fruitières (orangers, anacardiens, citronniers, manguiers, etc.) qui constituaient des ressources importantes pour les familles. Les activités de collecte de bois et de cueillette sont également perturbées (Handicap International, 2007). Aussi, les exploitations horticoles, les forêts et les bois de village se trouvent

dans un état sauvage, sans entretien et sont en proie aux feux de brousse. Certaines ressources ligneuses et non ligneuses font l'objet d'un pillage systématique. La riziculture est de moins en moins pratiquée par les populations locales qui optent parfois pour l'exode rural. La culture arachidière qui constituait l'une des principales sources de revenus dans la région a également été impactée (Handicap International, 2007). Cette conjoncture a aussi affecté des secteurs tels que la pêche ou encore le tourisme qui a été particulièrement confronté au ralentissement de ses activités (Gueye, 2011). Le secteur du commerce a été également affecté par l'insécurité. Par exemple, le commerce des fruits tels que la mangue et la banane était de plus en plus circonscrit autour des grandes villes (Handicap International, 2007).

Au plan social, on assiste au déplacement de milliers d'individus au fil des années, surtout dans les zones rurales. En raison de l'insécurité liée aux mines et à la présence des forces armées menaçantes, les populations ont été obligées de trouver refuge dans les pays frontaliers et dans les villes de Ziguinchor et Bignona (Robin, 2006). Rien que pour la destination Ziguinchor, le nombre de personnes déplacées internes ayant trouvé refuge dans la ville serait compris entre dix mille (10 000) et quatorze mille (14 000) (IDMC-NRC, 2010).

A côté de ces dommages, la profusion des mines a entraîné un grand nombre de victimes ayant subi des explosions de mines. Ces explosions sont désignées par le terme « accidents de mines » (Sène, 2020a). Avec un total de 751 « victimes directes » (554 blessées et 197 tuées par les mines), le Sénégal a été cité parmi les pays qui enregistrent le plus grand nombre de victimes de mines (CNAMS, 2009). De nos jours, on dénombre plus d'une centaine de survivants qui, du fait de leur handicap, sont confrontés à un cadre de vie sociale et scolaire peu sain et/ou dégradé, à des difficultés d'insertion socio-économique et aux conséquences psychologiques du traumatisme des mines (Sène, 2020a).

Du fait de cette expérience, les victimes ont été dominées par une fragilité psycho-émotionnelle qui s'est exprimée par une série de réactions négatives comme le stress, l'anxiété, les insomnies, l'irritabilité, la culpabilité ou encore des sentiments de regret (Sène, 2020a). À ces réactions immédiates et parfois temporaires se sont ajoutés, de manière durable, le développement d'un sentiment de dépendance, le désespoir, le sentiment d'infériorité, la perception d'un mépris de la part des proches sans oublier l'émergence de pensées parasites (envisager le suicide comme une solution).

Comme le démontre Sène (2020 a) cette situation de vulnérabilité a été à l'origine de la mise en place de plusieurs mesures d'assistance visant à réparer les préjudices subis par ces victimes et à favoriser, par ricochet, leur épanouissement social. Cette dynamique d'assistance a mobilisé plusieurs catégories d'acteurs dont les plus visibles sont, entre autres, les structures

étatiques (CNAMS¹, hôpital Psychiatrique et CAOSP²), les organisations non gouvernementales et l'ASVM. Néanmoins, le peu d'attention que la question des mines a suscité de la part des chercheurs qui se sont intéressés à la Casamance n'a pas permis de documenter, de manière suffisante, l'effet de ces acteurs dans l'amélioration des conditions de vie des victimes de mines. Bien que certains travaux aient abordé les conséquences des mines (Marut, 2010 ; Gueye, 2011 ; Sène ; Sène, 2020b) et la question de l'assistance aux victimes de mines (2020a), la problématique des mines et notamment la question de l'assistance aux victimes de mines restent insuffisamment documentées.

Le présent article se propose donc de mettre le focus sur cette question. Il s'inscrit, ainsi, dans la problématique du handicap mais inaugure une nouvelle piste de réflexion qui rompt avec les approches classiques qui ont souvent pensé le handicap à travers les notions de représentations sociales (Chossy, 2011 ; Diop, 2012), d'inclusion scolaire (Ebersold et al., 2006 ; Caraglio, 2017) ou encore d'intégration sociale et/ou professionnelle (Echivard, 2009 ; Weber, 2011 ; Prado, 2014 ; Tonchev, 2014). En effet, la présente étude se propose d'aborder le handicap à travers la relation entre la personne handicapée et son groupe de pairs pour interroger l'enjeu de l'appartenance associative dans la prise en charge du handicap. Une telle rupture procède d'une volonté de penser le handicap dans sa dimension socio-identitaire (enjeu de l'appartenance à un groupe de pairs dans le vécu du handicap) tel que le suggèrent les travaux de Richard (2006) sur la problématique identitaire et les réactions émotionnelles que génère la survenue d'un handicap acquis et la théorie de Bokanowski (2010) sur les implications psycho-émotionnelles négatives du traumatisme.

Par ailleurs, l'accent mis la solidarité associative permet d'appliquer la théorie du « soutien des pairs » (Wallot, 2019) mais aussi celle des « influences sociales des pairs » (Sage et Kindermann, 2000) au contexte associatif pour mettre en évidence la contribution de l'association dans la prise en charge de ses membres. L'analyse de cette « solidarité de proximité » (Balmory, 2015) permet également de mettre en exergue le dépassement de la logique classique de prise en charge de la vulnérabilité basée sur la solidarité institutionnelle. En effet, de par sa rencontre quotidienne avec les membres fragiles, elle est en capacité de combler les lacunes de la solidarité institutionnelle car étant apte à répondre à une demande sociale qui s'inscrit de moins en moins dans les catégories juridiques traditionnelles du droit social, mais qui réclame une intervention de plus en plus personnalisée, complexe et humaine (Balmory, 2015).

¹ Centre National d'Action Antimines au Sénégal.

² Centre Académique de l'Orientation scolaire et professionnelle de Ziguinchor.

Dès lors, étant l'unique association de victimes de mines en Casamance et développant un soutien exclusivement orienté vers ses membres associés, l'ASVM constitue naturellement la cible de cette étude qui interroge l'enjeu de la solidarité associative dans la résilience des victimes de mines. Créée en 1999, pendant une période marquée par une forte recrudescence des accidents de mines en Casamance, l'ASVM est une association de droit sénégalais qui regroupe les victimes civiles de mines (antipersonnel et antichars) du conflit en Casamance. Son objectif est de contribuer à la réinsertion sociale et économique de ses membres en créant un environnement favorable à leur épanouissement par le biais notamment d'une assistance sanitaire, sociale, économique et parfois scolaire. Elle développe ainsi une solidarité associative orientée vers ses membres, les plus fragiles notamment, pour favoriser leur résilience à la suite du traumatisme vécu. C'est donc l'enjeu de cette solidarité dans la résilience des victimes de mines que la présente étude se propose d'analyser.

Ce faisant, la problématique s'articule autour de la question ci-après : quel est l'enjeu de solidarité associative, développée par l'ASVM, dans la résilience traumatique des victimes de mines en Casamance ?

Méthodologie de recherche

Cette étude s'est appuyée sur la méthode qualitative. Les données ont été recueillies grâce à une série d'entretiens semi directifs et de récits de vie réalisés (entre janvier et avril 2018) avec vingt-sept (27) victimes de mines. Les entretiens ont duré entre 30 et 35 minutes en moyenne. Toutefois, les rencontres répétées avec les victimes ont permis d'établir une relation de confiance avec elles et d'inscrire l'approche méthodologique dans une démarche itérative. Cette démarche a permis notamment de recueillir des témoignages des victimes vivant dans la région de Ziguinchor, principal foyer du conflit en Casamance et qui abrite l'écrasante majorité de la population de victimes de mines³. Des entretiens ont été également effectués avec trois responsables travaillant au niveau des structures impliquées dans la prise en charge psychosociale des victimes de mines (CNAMS, CAOSP et Hôpital psychiatrique de Ziguinchor).

Ainsi, grâce à une approche alliant diversification et recherche de la saturation empirique, nous avons pu discuter des implications psycho-traumatiques du handicap lié aux mines mais aussi et surtout des actions de solidarité développées par l'ASVM pour contribuer à la résilience des victimes de mines. A l'aide d'un guide d'entretien semi-structuré, les victimes de mines ont été notamment amenées à répondre aux questions ci-après : Comment

³ Un recensement effectué par le CNAMS (2009) fait état de 151 victimes directes vivant dans la région de Ziguinchor sur un total de 182 recensées en Casamance (soit un taux 82,96 %).

avez-vous vécu votre handicap ? Quelles sont les actions de solidarité développées par l'ASVM à votre rencontre ? Quels sont, pour vous, les effets des actions d'assistance développées par l'ASVM ? Comment appréciez-vous les efforts consentis par l'ASVM pour accompagner les victimes de mines ?... Pour leur part, les responsables de l'ASVM ont été interrogés sur les actions d'assistance qu'ils ont développées à l'endroit des victimes de mines, le modèle d'intervention utilisé, le ressenti des victimes ou encore l'effet de leurs actions dans l'amélioration du vécu du handicap. Enfin, les responsables des structures d'accompagnement ont été notamment interrogés sur les causes et les enjeux de la collaboration avec l'ASVM.

Les diverses informations recueillies ont été exploitées grâce à une analyse de contenu qui a notamment mis en exergue les variables relatives à l'affect traumatique chez les victimes de mines et celles traitant de l'effet de l'ASVM dans la prise en charge de cet affect.

Résultats et discussion

Cette partie décrit d'abord la nature de l'affect traumatique vécu par les victimes de mines avant d'analyser la contribution de l'ASVM dans la résilience de ces dernières.

Affect traumatique des victimes de mines

Comme l'ont démontré de précédentes études (Sène, 2020a ; Sène, 2020b), les accidents de mines sont à l'origine de plusieurs formes de réactions émotionnelles immédiates à l'exemple des sentiments de rupture identitaire, de dégradation et de désespoir qui ont été constatés chez plusieurs victimes.

De telles réactions renseignent sur les difficultés d'intégration de l'évènement traumatique par les victimes. Elles renseignent également sur les problèmes d'acceptation de la situation de handicap acquis du fait de la présence des mines. En effet, dans le récit de l'histoire traumatique des victimes, on s'aperçoit que la perte d'un membre est apparue comme un élément déterminant de l'affect, lequel a été marqué par l'apparition de plusieurs émotions négatives. Selon les témoignages recueillis le stress était l'émotion la plus représentative car la majeure partie des victimes a décrit le stress comme étant la principale réaction dans le contexte post-accident. Pour d'autres, la réaction dominante était la colère ou l'angoisse. Le témoignage de F.T. (une victime de mine) permet de mieux comprendre cette situation :

« J'étais trop affectée par mon handicap car je ne me suis jamais imaginée vivre avec un pied amputé. A un moment j'en voulais à tout le monde même à moi-même. J'étais trop stressée et irritable. Jusqu'à présent, et sans les connaître, je continue à détester ceux qui ont placé la mine dans cet endroit. Je pense que depuis cet évènement, je suis devenue

trop nerveuse et très susceptible. Parfois je sens une peur m'envahir sans que je ne sache d'où ça vient mais je sais qu'elle a un lien avec cet événement ».

De manière générale, cet état d'alerte traumatique s'est notamment exprimé par des cauchemars répétitifs, la peur excessive et des insomnies sévères. L'apparition de pensées « parasites » constitue également un dommage collatéral. Plus d'un tiers des victimes affirment avoir pensé à se suicider après avoir pris conscience du handicap. L'exemple de C.G (une victime de mine) démontre bien la lourdeur de l'affect :

« Dans les jours qui ont suivi l'accident, mon principal problème était l'angoisse. J'ai beaucoup pensé à ma situation d'avant et en me regardant, je me disais dans ma tête que j'aurais dû éviter l'accident. Je ne sais pas comment mais c'est ce que je me disais (...). J'ai eu du mal à accepter ma situation car, à mes yeux, j'étais quelqu'un d'autre ».

Cet exemple, comme tant d'autres, permet de comprendre l'accident de mine comme une expérience traumatisante qui a bouleversé la structure cognitive et le schéma émotionnel des victimes de mines. En effet, les émotions et sentiments développés par ces dernières, à la suite de l'accident, démontrent les difficultés d'acceptation et d'intégration du handicap dans leur schéma cognitif. Cet état de fait reste lié au sentiment de rupture identitaire que provoque le handicap acquis. Comme l'a démontré Boquel (2009), cette rupture ébranle la cuirasse caractérielle de la victime et provoque une « impasse événementielle d'origine traumatique » (Boquel, 2009).

Chez la plupart des victimes, cette impasse s'est notamment exprimée en termes de comparaison entre le moi ancien et le moi actuel ; le premier étant perçu comme le moi idéal alors que l'autre est vu comme dégradant. Les propos de F.B. (une victime) illustrent bien cet état de fait :

« A chaque fois que je pense à ma situation d'avant, je suis triste. J'étais mobile et très autonome. Actuellement, je suis condamné à rester sur un fauteuil car je ne peux rien pour moi-même. C'est difficile à accepter mais je me sens inférieur ».

Comme on peut bien s'en apercevoir, la comparaison identitaire débouche souvent sur le développement d'un sentiment d'impuissance et la persistance d'une image cognitive qui remettent en question le sentiment d'auto-efficacité et qui démontrent les difficultés à surmonter le handicap acquis. Cela a entraîné, chez certaines victimes, le développement d'un sentiment d'inutilité

sociale mais aussi la perception d'une certaine forme d'altérité qui pousse la personne « nouvellement » handicapée à se percevoir comme différente voire anormale. Le contraste entre l'état de validité physique antérieur et la « nouvelle » situation de handicap a donc entraîné un problème d'acceptation identitaire chez des victimes qui, vivant avec un « avant et un après » (Richard, 2006), ont éprouvé des difficultés à faire le deuil de leur handicap.

Cet état affectif délicat a donc favorisé la mobilisation d'une solidarité associative qui s'est développée autour de l'ASVM.

Effet de l'ASVM dans la résilience des victimes de mines

Fort de son objectif de contribuer à la réinsertion sociale et à l'épanouissement de ses membres, l'ASVM s'est positionnée comme un acteur-clé dans la conduite de la politique d'assistance initiée en faveur des victimes de mines en Casamance. En effet, en faveur de ces dernières, elle intervient, entre autres, dans la conduite des activités de rééducation physique, la prise en charge médicale et l'aide à l'emploi. A travers ces piliers de la politique d'assistance aux victimes, elle facilite, par le biais d'un travail d'intermédiation associative, le ciblage, l'expression des besoins et la mobilisation des bénéficiaires. Cette association constitue donc un intermédiaire par qui passent les structures impliquées dans l'assistance aux victimes de mines. Comme l'explique un responsable du Centre National d'Action Antimines au Sénégal (CNAMS) :

« L'ASVM est le seul répondant des victimes de mines. Nous nous appuyons beaucoup sur ses responsables pour rendre opérationnelles les actions proposées. Nous travaillons aussi avec eux pour définir le domaine d'intervention et l'orientation des actions ».

Il convient de noter que c'est notamment dans le domaine de l'assistance psychologique que la portée de l'action de l'ASVM semble beaucoup plus visible. En effet, dans le cadre de leur intervention, les structures d'écoute et de prise en charge psychologique⁴ s'appuient sur les membres de cette association pour conduire des activités d'assistance psychologique. C'est pour cette raison qu'elle est citée, à côté de ces structures, comme étant une actrice majeure de cette forme d'assistance. En effet, elle constitue généralement le bras technique de ces structures dont les spécialistes forment ses membres sur la conduite du débriefing psychologique et

⁴ Centre Académique de l'Orientation scolaire et professionnelle de Ziguinchor (CAOSP) et Hôpital psychiatrique de Ziguinchor.

de l'écoute empathique pour leur permettre de développer ces actions auprès des victimes de mines.

Cette démarche répond à une volonté de faciliter l'accès des cibles aux services d'assistance psychologique. En effet, l'insuffisance des ressources humaines au niveau de ces structures et l'inaccessibilité de certaines zones obligent ces dernières à s'appuyer sur les leaders de l'association et ses responsables de sections (départementales et communales) pour rendre effectif le soutien psychosocial avec toutes ces exigences en termes de proximité et de durabilité. A ce propos, un responsable du CAOSP (structure impliquée dans la conduite de cette forme d'assistance) estime que :

« Le CAOSP collabore souvent avec les responsables de l'ASVM pour assurer aux victimes nécessiteuses un suivi régulier. On s'appuie sur eux car ils ont vécu les mêmes expériences. Mais auparavant, on les capacite pour les aider à mieux conduire des séances de débriefings collectifs. Ils animent aussi des séances de sensibilisation et mènent d'autres activités de soutien parallèle ».

Pour sa part, le témoignage du Directeur de l'Hôpital psychiatrique (autre structure impliquée dans l'assistance psychosociale aux victimes de mines) permet de mieux comprendre l'enjeu de cette approche :

« On a compris que ces leaders associatifs étaient incontournables pour l'efficacité de l'aide psychologique. Leur implication nous permet de régler le problème d'accessibilité. C'est l'association qui connaît mieux les victimes, elle facilite donc le repérage et ses membres sont formés pour dérouler des débriefings collectifs dans la phase de rééducation psychologique ».

Néanmoins, au-delà de l'accessibilité, il faut souligner que cette implication permet d'améliorer la qualité du soutien psychologique offert aux victimes de mines. En effet, la proximité identitaire entre les victimes et les responsables de l'ASVM (eux-mêmes victimes de mines) facilite la compréhension mutuelle et l'entraide. Comme le suggèrent Jaouen et *al.* (2006), une relation d'accompagnement (d'assistance psychologique) combine technicité, empathie et disponibilité. Ainsi, dès lors qu'ils bénéficient d'un renforcement de capacités, les responsables de l'ASVM se positionnent comme les seuls acteurs capables de prendre en compte ces trois enjeux dans le temps. Comme le soutient B.G. (une victime de mine) ;

« L'ASVM est très proche des victimes. Dès qu'un accident est déclaré, ils sont les premiers à se présenter pour soutenir ».

et assister la victime. Ils viennent souvent à notre chevet car ils nous comprennent. Ils sont des victimes, ils ont vécu pareilles situations c'est pourquoi, ils veillent sur nous pour nous éviter de nous sentir seul ».

Par ailleurs, ces derniers organisent également des visites à domicile pour écouter les victimes afin de leur apporter un soutien social face à des difficultés d'acceptation ou de compréhension dont elles sont parfois victimes de la part de leur entourage. Ces visites ont souvent débouché sur des actions de médiation familiale pour expliquer aux proches la nécessité de développer un soutien social empreint d'empathie et d'éviter toute attitude pouvant entraîner, chez les victimes, la perception d'une forme de stigmatisation quelconque. A l'occasion d'un entretien tenu avec lui, le président de l'ASVM a bien insisté sur cet aspect :

« On a réglé beaucoup d'incompréhensions entre des victimes et leurs proches. Parfois, les familles communiquent mal avec les victimes. Aussi, elles ne savent pas traiter avec les victimes. C'est pourquoi leurs attitudes sont souvent maladroites et les victimes les interprètent de manière négative. Vivre avec un handicap n'est pas facile, la perte d'un membre entraîne des effets négatifs. Chacun a sa manière de gérer ça. Certaines victimes sont très nerveuses et facilement irritables. C'est pourquoi, les visites en milieu familial nous permettent de faciliter la communication entre eux et d'apporter le soutien nécessaire aux victimes. Nous travaillons également à leur redonner espoir car à travers nous, elles peuvent facilement comprendre qu'elles ne sont pas seules. On essaye également de les amener à vivre leur handicap de manière positive. On a vécu la même expérience, donc c'est très facile de se comprendre entre nous ».

En s'appuyant sur la proximité identitaire, les membres de l'association facilitent l'échange avec les victimes de mines et contribuent à réduire la vulnérabilité de ces dernières en les amenant à comprendre qu'elles ne sont pas seules dans leur souffrance. Cette approche permet également de rétablir le lien social rompu ou devenu vulnérable avec le handicap. C'est ce que laissent paraître les propos de K.D. (une victime de mine) :

« Personnellement, si j'ai pu sentir une certaine amélioration dans ma situation c'est grâce aux leaders de l'association. Ils nous apportent un soutien que nos proches ne nous apportent même pas. Pour ma part, je peux dire que

c'est grâce à eux que ma famille me considère désormais. Au début, j'étais vraiment incomprise mais depuis qu'ils sont venus échanger avec ma famille, je me sens moins rejetée ».

La contribution de l'organisation dans la réinsertion sociale des victimes de mines s'aperçoit, en outre, à travers l'organisation de rencontres collectives qui ont favorisé le soutien des pairs. En effet, le pari de faciliter l'inclusion sociale, à partir de la solidarité associative, a permis à l'ASVM d'aider certaines victimes à s'identifier à d'autres et à s'assister mutuellement. Les enquêtes effectuées ont permis de se rendre compte que plusieurs victimes ont commencé à relativiser leur situation à la suite des rencontres d'échanges organisées par l'association. L'exemple de M.B. (une victime) permet d'illustrer ce constat :

« Je m'étais isolée et je passais tout mon temps à m'apitoyer sur mon sort. Quand je suis allée à une réunion des victimes, j'ai rencontré des gens qui avaient des préjudices beaucoup plus sévères. Certains avaient des doubles amputations. J'ai vu quelqu'un qui était amputé du pied et de la main. C'est en voyant ces gens que j'ai compris qu'il y avait d'autres personnes qui vivaient une situation beaucoup plus délicate. C'est en ce moment-là que j'ai commencé à accepter ma situation. C'est de là-bas que j'ai recommencé à discuter et à m'ouvrir aux autres car je me disais parfois que j'ai été chanceuse de me retrouver avec un seul pied amputé ».

On s'aperçoit à travers les propos de cette victime (et à travers ceux d'autres victimes) de l'efficacité des échanges avec les groupes de pairs. Les rencontres de groupes sont, en effet, des occasions de partage et d'écoute qui aident certaines victimes à sortir de leur angoisse personnelle et à s'identifier à des personnes qui partagent leur vécu. L'appartenance ou même la participation à un groupe de pairs permet ainsi de minimiser certaines souffrances qui découlent d'un repli sur soi et de l'existence d'un rejet familial dont bon nombre de handicapés croient être victimes. En témoignent les propos de M.N (une victime de mine) :

« Les réunions sont très utiles. On se conseille mutuellement et cela crée une proximité. Cela nous amène à dédramatiser notre situation et mieux nous affirmer. (...). J'apprécie vraiment la solidarité qui prévaut ici. Je sais que sans l'ASVM les victimes seraient dispersées et vivraient dans l'oubli. Aujourd'hui beaucoup de projets s'intéressent à nous grâce aux responsables de l'ASVM. Ils collaborent

avec beaucoup d'institutions pour nous aider dans la formation, l'entrepreneuriat et surtout l'intégration sociale. Ils ne peuvent pas faire tout mais ils font de leur mieux. On est fier d'eux ».

Il va s'en dire que l'organisation de ces rencontres a favorisé l'apparition d'une identité de groupe au moment où certaines victimes se sont effectivement rendu compte qu'elles partageaient leur vécu avec d'autres. Ces rencontres ont également permis à d'autres victimes de se départir du complexe lié au handicap acquis, cela du fait du contact avec des pairs qui vivaient une situation beaucoup plus dramatique.

Cette manière d'être soutenu par les pairs témoigne non seulement d'un processus relativement inversé à la logique classique de l'accompagnement (Jaouen et *al.*, 2006) mais aussi d'une relation d'échange où se crée une situation de gagnant-gagnant entre la victime et les responsables de l'organisation qui, eux aussi, voient à travers les victimes leurs semblables. Ce qui donne ainsi naissance à une sorte d'alliance stratégique et renforce les performances sociales de l'organisation.

Conclusion

En définitive, l'étude démontre que les membres de l'ASVM ont développé plusieurs actions qui ont concouru à réduire la vulnérabilité des victimes de mines par le biais d'une résilience associative. Elle met ainsi en exergue l'enjeu de la solidarité associative dans la résilience des membres. Elle démontre ainsi que le soutien des pairs constitue une logique de solidarité associative qui contribue à réduire la vulnérabilité des membres dans un contexte où les spécialistes de la relation d'aide peinent à apporter toute l'assistance requise. Cette étude renforce ainsi la littérature sur les organisations associatives et notamment sur l'analyse des dynamiques de solidarités qui se déploient au sein de ce type d'organisation. Elle constitue également une contribution significative à la réflexion sur le handicap.

Toutefois, l'une des questions qu'il faudrait se poser à la suite des constats préalablement établis c'est : quelles autres activités l'ASVM développe-t-elle pour inscrire la résilience des victimes de mines dans la durée ? En plus de mettre en exergue un des aspects non couverts par la recherche, cette question ouvre, pour ainsi dire, une piste de réflexion qui se présente comme une des perspectives de la présente étude.

References:

1. Balmory, D. (2015). L'action associative face aux défis de la solidarité, C.E.R.A.S, Revue Projet, n° 346, pp. 42-49. URL : <https://www.cairn.info/revue-projet-2015-3-page-42.htm>.

2. Bokanowski, T. (2010). « Du traumatisme au trauma : les déclinaisons cliniques du traumatisme en psychanalyse », *Revue Psychologie clinique et projective*, n° 16, 9-27. URL : <https://www.carin.info/revue-psychologie-clinique-et-projeective-2010-1-page-9.htm>.
3. Boquel, P. (2009). *Handicap, traumatisme et impasse*. Paris, Editions EDK.
4. Caraglio, M. (2017). Les élèves en situation de handicap : inclusion, encore un effort. Actes de communication, 39e colloque de l'AFAE. URL:https://cache.media.eduscol.education.fr/file/Formation_continu_e_enseignants/97/3/Les_eleves_en_situation_de_handicap-M_Caraglio_au_colloque_AFAE_978973.pdf.
5. Chossy, J.F. (2011). *Evolution des mentalités et changement du regard de la société sur les personnes handicapées : passer de la prise en charge à la prise en compte*. Paris, La Documentation française.
6. CNAMS. (2009). *Plan d'Action National pour l'Assistance aux Victimes 2010-2014*. Rapport de planification. Centre National D'action Antimines au Sénégal.
7. Diop, I. (2012). Handicap et représentation sociales en Afrique occidentale. *Revue le Français aujourd'hui*, n°177, 19-27. URL : <https://www.carin.info/revue-le-francais-aujourd'hui-2012-2-page-19.htm>.
8. Duvoux, N. (2016). La solidarité sociale n'est pas un sentiment, mais cette réalité de l'interdépendance entre les membres de la société. *Visions solidaires pour demain*. URL : www.solidarum.org.
9. Ebersold, S., Plaisance, E., et Zander, C. (2006). *Ecole inclusive pour les élèves en situation de handicap : accessibilité, réussite scolaire et parcours individuels*. Rapport de recherche CNESCO, halshs-01445378.
10. Echivard, J. P. (2009). Représentations du handicap et pratiques d'accompagnement. *Revue Empan*, n°74, 45-49. URL : <https://www.carin.info/revue-empan-2009-2-page-45.htm>.
11. Gueye, D. (2011). *Résultats de l'étude des Connaissances-Aptitudes-Pratiques (CAP)*. Rapport d'étude. CNAMS, ASVM, HI, UNICEF.
12. Handicap International. (2007). *Etude d'urgence sur l'impact des mines en Casamance*. Rapport de recherche. URL : <http://www.franco-mines.com>.
13. IDMC-NRC. (2010). *Sénégal. De nouveaux déplacements et défis à l'obtention de solutions durables en Casamance*. Rapport d'étude.
14. Jaouen, A., Loup S., et Sammu S. (2006). Accompagnement par les pairs, confiance partagée et résilience : illustration au travers du cas voiles d'OC. *De Boeck Supérieur | Revue de l'Entrepreneuriat*, n°1 Vol. 5, pp. 59 - 72.

15. Manga, M.L. (2014). *La Casamance dans l'histoire contemporaine du Sénégal*, Paris Harmattan.
16. Marut, J. C. (2010). *Le conflit de Casamance : ce que disent les armes*. Paris, Karthala.
17. Nelly, R. (2006). « Le déracinement des populations en Casamance : Un défi pour l'État de droit », *Revue européenne des migrations internationales*, vol 22, n°1, pp. 153-181.
18. Prado, C., (2014). *Mieux accompagner et inclure les personnes en situation de handicap : un défi, une nécessité*. Paris, Les éditions des journaux officiels.
19. Richard, J.T. (2006). *Psychanalyse et Handicap*. Paris, Harmattan.
20. Sage, N. A. et Kindermann, T. A. (2000). « Influences sociostructurelles du groupe de pairs sur la motivation scolaire des jeunes enfants ». *Revue des sciences de l'éducation*, 26 (1), 133–150. URL : <https://doi.org/10.7202/032031ar>.
21. Sène, I. (2020 a). *Le conflit casamançais : focus sur l'assistance aux victimes de mines*. Paris, Harmattan.
22. Sène, I. (2020 b). Handicap acquis, affect traumatique et perception de soi : Le cas des victimes de mines en Casamance. *Revue internationale des sciences économiques et sociales*. Paris, Harmattan, pp.121-138.
23. Tonchev D. (2014). *Les politiques du handicap*. Paris, Editions ASPH.
24. Vermeersch, S. (2001). L'engagement associatif : quelles solidarités?. *Les Annales de la recherche urbaine*, N°89, pp. 46-52.
25. Wallot, H.A. (2019). Le soutien des pairs souffrant de psychose : l'expérience du programme « Passer l'espoir au suivant ». *Santé mentale au Québec*, 44(1), pp. 111–126. URL : <https://doi.org/10.7202/1060279ar>.
26. Weber, F. (2011). *Handicap et dépendance : Dramas humain, enjeux politiques*. Paris, Editions Rue d'ULM.



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Assessment Of The Effect Of Socio-Economic Infrastructure On Rural Economy In Kaduna State, Nigeria

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Abstract

The paper examines the effect of socio-economic infrastructure of the rural areas on the rural economy in Kaduna State. The study adopts a correlation analysis, a Multicollinearity and Cronbach Alpha Reliability tests as well as regression analysis on primary data. Findings from the study reveal that there is a positive relationship between socioeconomic infrastructure and rural economy, while the multicollinearity test shows absence of high correlation among the independent variables and the Cronbach Alpha confirms internal consistency of the variables. Furthermore, the regression analysis indicates that socio-economic infrastructure, particularly road, electricity supply, market and telecommunication infrastructure all have positive and statistically significant effects on the rural economy. The paper therefore, recommends that governments should increase efforts towards developing the infrastructure in the rural areas in order to facilitate the growth of the economy in the rural sectors.

Keywords: Rural Economy, Infrastructure, Market, Electricity, Telecommunication

Introduction

The rural economy, which is mainly agriculturally based, holds considerable potentials for job creation, industrial support and economic growth. The agricultural sub-sector of the rural economy comprises economic activities such as crop farming, animal husbandry and dairying, fisheries, poultry and forestry.

Farming remains the major primary economic activity of most rural communities in Africa particularly Nigeria. It serves as the backbone or source of raw materials to other sectors; food supply to the entire population, demand for industrial goods, and supplying of inputs for industries. Hence, the growth of other sectors depends on the growth and development of the rural economy, that is, the agricultural sector, as postulated by Xenopho: (440-355 BC) in Saheed, (2014), that while agriculture prospers, all other arts alike are vigorous and strong. But where the land is forced to remain desert, the spring that feeds the other arts is dried up. Hence, any sudden and profound changes which might affect the farm sector could have severe consequences in terms of social, economic and political stability of any agrarian developing nation (European Commission, 2000).

The non-agricultural sub-sector of the rural economy consists of economic activities relating to agrobusiness which involves buying and selling of agricultural products, which include inputs suppliers, agro-processors, traders, exporters and retailers. More so, in the agricultural sector, there are farm activities, as well as off-farm activities ranging from subsistence farming to large commercial agrobusiness that supplies the global markets through regional and national linkages with other sectors (International Labour Organisation, 2008).

In Kaduna State, majority of the rural people actively engage in both food and cash crops farming. These include cotton, groundnut, tobacco, ginger yam, cassava, maize, beans, guinea corn, and millet: Besides, a significant number of households are involved in livestock production like poultry, cattle, sheep, goats and pigs. The traditional livestock production systems predominate the sector with essentially low input-output systems. However, the modern livestock production systems in the state expend more capital and utilize mostly purchased variable inputs such as feeds, drugs, vaccines etc, with significantly higher productivity compared to the traditional production systems (Kaduna State Government, 2013).

The commercial poultry production sector is dominated by medium and small-scale operators by Nigerian standard. This is in spite of the potentials of the state in the poultry sector, and given the fact that the state is a major producer of maize; sorghum; groundnut and soyabean, all of these are major poultry feed ingredients.

Most of the fish outputs of the state come from the wild, which is

gradually declining, hence aquaculture is being promoted. The aquaculture itself depends on fingerlings and compounded ration. Both of which can be produced in the state with minimal investments, since most of the ingredients for compounding the ration are produced within the State.

Some of the challenges inhibiting the demonstration of potentiality of rural areas include: production system that is characterized by small-scale producers that is also depends on low adoption of improved inputs and practices resulting in low productivity; post-season rural unemployment; lack of adequate infrastructure like good road networks, electricity supply, telecommunication networks, markets; and limited access to financial services.

Roads networks are constructed to connect human communities and facilitate access to natural resources available in the rural areas and transportation of harvest from the farm to markets. However, the rural environment that is being perceived as the engine of economic growth of the country, the main supplier of food to the urban population and the custodians of the ecosystems, remain inaccessible due to lack of roads. In many of the rural areas, the farmers and their families trek several kilometers carrying heavy loads from the farm to market places.

Despite the importance of electricity supply, that is considered as the hub of economy and the engine room of industrial development, according to the World Bank figures, only about 59.3 per cent of the Nigerian population have access to electricity as at 2016-2017. However, the situation is even worse in the rural communities across the country. A situation where most of the rural communities stay in darkness with no electricity supply (UNDP, 2019). In Kaduna State, electricity supply is on average in some cities but inadequate in the rural communities. Hence, in the rural areas, farmers have to depend highly on privately owned generators to operate their irrigation systems. More so, many farmers cannot preserve their farm products. So, most often the harvest are sold at very cheap prices, to avoid total loss, while many goods are wasted.

Availability of standard agricultural markets for the rural farmers is another challenge impeding the development of the rural economy. Farmer markets are traditional open places in the rural areas where agricultural and domestically produced goods are traded and people from the neighbouring communities can converge to transact business, particularly agribusiness. Since there are no stores or warehouses, the farmers trek several kilometers with their products to the market, and any unsold goods are returned to the village via the same channel. In such a market situation, the rural farmers are often the price takers and are always at the mercy of the middlemen who are the price makers. The stress of returning home with unsold products and fear

of wastage leave the farmers with no option than to sell their products at give-away prices, thereby reducing the income of the farmers.

Meanwhile, communication infrastructure like internet services, mobile and land phone networks, television and radio transmission stations (Aigbokha,1999), that are necessary for growth and development of the rural economy are not available in the rural communities. Hence the rural dwellers and their products are disconnected from the urban and global economy, making it very difficult for the rural dweller to link the urban centre and tap from the large markets through the internet and web.

In response to the developmental challenges of the rural area and development of the rural economy, various governments have formulated several policies and programmes but implemented few towards the development of the rural areas. For example, the first National Development plan spanned between the years 1962–1968 prioritised agriculture with emphasis on introduction of modern agricultural methods through farm settlements, co-operative (nucleus) plantations, supply of improved farm implements, and a greatly expanded agricultural extension service.

Furthermore, the Directorate of Food, Roads and Rural Infrastructure (DFRRI) was established in recognition of the benefits associated with basic needs such as food, shelter, potable water, etc. The integrated approach to rural development provided for the necessary basic infrastructures that stimulated the growth of agro-allied small-scale enterprises in rural areas.

The Nigerian Rural Electrification Agency (REA) was created by the Electric Power Sector Reform Act in 2006, with the aim of facilitating the provision of affordable power supply for residential, commercial, industrial and social activities in the rural and peri-urban areas of the country.

In an effort to improve the rural economy in Kaduna State, the state government, on its part, has been providing support to farmers in terms of extension advisory services through the recommended extension agents. It is also providing input like improved seeds, agrochemicals, credit facility, tractors services and fertilizers at subsidized rates. In addition, the irrigation facilities put in place by the Government and Fadama III Programme have been contributing to dry season farming. Public intervention in livestock development is focused on the provision of support services such as pests and disease control, veterinary public health, poultry development, beef and dairy animal development, and grazing reserve development (KDSG, 2013). The state government has also engaged in improving the economic infrastructure in the rural areas of the state. However, all these efforts by various governments towards improving capital infrastructure in the rural areas, have not been able to provide much effect on the economy of the rural areas of the state. Hence, the effectiveness of government policy in this direction is yet to be ascertained.

Given the foregoing, this paper aims at empirically examining the effect of socio-economic infrastructure on the rural economy in Kaduna State, Nigeria.

To this end, the paper is organized into five sections. Next to the introduction is section II, which focuses on the review of relevant literatures. Section III discusses the methodology. Section IV analyses and interprets the data, while section V summarises the findings and offer some policy recommendations.

Literature Review

Conceptually, Hirschman (1958) describes infrastructure as those basic facilities which play a critical role in creating investment opportunities for other industries. Without the existence of this infrastructure, the functionality of other primary, secondary and tertiary activities would be a mirage. Infrastructure is the facilitator to production activities that serves as a foundation stone for the growth of both the rural and urban economy. Hence, in the context of rural economy, infrastructure can be seen as the supporting system that facilitates the growth of the rural economy, and assists the economic agents in the rural area to enable them explore the opportunities in the economic environments.

UKEssay (2018), describes economic infrastructure as all such elements of economic change including power, transport and communication, that serves as the foundation for the growth of the economy. Effective electricity supply tends to facilitate the pace of production activity while an effective transportation system would make the movement of goods and people from one place to the other, and effective means of communication would help to facilitate marketing, and help to link-up various markets.

Meanwhile, Reddy (2018) views economic infrastructure as the essential amenities that support the development of other sectors of the economy. These amenities assist in improving the overall productivity of the economy, and assist in smooth running of all the sectors of the economy.

Social infrastructure can be described as core elements of social change including academic institutions and health facilities that serve as a building block for the process of social development of a country. Social development involves human resource development, which implies the development of healthy, skilled and efficient human beings, (UKEssay, 2018) for the growth and development of the nation.

Theoretically, the study is anchored on unbalanced growth theory propounded by Hirschman who believes that owing to unavailability of adequate resources in less developed countries, creating imbalances in the system would be the best strategy for development. According to the theory, rather than investing in the sector simultaneously, investment should be made

in the strategic sector of the economy that will create a trickle-down effect on other sectors to develop. For instance, public investment in social overhead capital like roads, electricity, transport and communication infrastructures will stimulate the growth of other sectors of the economy.

Alternatively, initial investment according to the theory, could create shortages, thereby providing the incentive for other sectors to meet needs for backward linkages. For example, the development of a textile factory would create demand for more cotton, and the establishment of shoe factory would create a demand for leather. The appropriate direction would vary with the linkages that were most significant for a particular country. However, in case investment is made first in directly productive activities, the private investors would be facing a lot of challenges if there is no adequate or there is lack of social overhead capital (infrastructure). It may be difficult for any industry in a particular region to grow if social overhead capital facilities or infrastructures are not available. Thus, excess social capital overhead or infrastructures will be a pressure-relieving for the rural economy.

Empirically, several scholars within and outside the country, have explored the relationship between socio-economic infrastructures and rural economy. For instance, Daud, et.al. (2018), assessed the infrastructures' effect on food crop production profitability among rural farming households in Oyo State, Nigeria. Using a Descriptive Statistic, Budgeting Analysis (BA) and Ordinary Least Square regression (OLS), the result indicates that rural infrastructure is essential to the output of agriculture production in the study area.

Adeniyi, et.al. (2018), assess road transportation impact on rural development, with a view to determine the contributions of road transport to rural development in Akure North Local Government of Ondo State, Nigeria. Systematic Sampling technique was used to select and administered questionnaire to about 240 respondents. Findings from the study revealed that the rural roads are in poor condition which has an influence on the cost of transporting farm produce and the economy of the area. On their part, Luis and Alejandro (2018) estimate the impact of public infrastructure on economic growth in the eight regions of Oaxaca for the period 2003-2013. The study adopted a fixed-effects model, and the results indicate that investment in infrastructure has been insufficient and misallocated. However, the social infrastructure shows the greatest impact on growth.

Palei (2015), examines the degree of the influence of infrastructure on national competitiveness. The study also attempts to identify and discuss the key infrastructure factors that determine national competitiveness, which in turn influence positively on the total results of industrial policy. The finding from the study showed that national competitiveness is influenced basically by the level of institutional development and other seven factors, including

infrastructure that in turn is determined mainly by the quality of roads, railroad infrastructure, air transport and electricity supply.

Rahman (2014), investigates the impact of rural infrastructure on making a choice between farm and non-farm enterprises vis-à-vis income from Bangladeshi rural households. The study used a bivariate Tobit model, and the result reveals that rural infrastructure has a negative and statistically significant impact on enterprise choices vis-à-vis income. Other factors like household assets, farm size, farming experience, livestock resources, and education were found to also exert a significant influence.

More so, Olufemi, et.al. (2013), investigate the effect of infrastructural development on economic growth. The study adopts a simple model of an economy with foreign investment and public infrastructure with a diversified equilibrium where the economic growth could not translate to economic development due to lack of infrastructure, high poverty rate, unemployment etc. Hence, it is concluded that infrastructure has a significant effect on economic development.

Oguzor, (2011) examines the effect of social infrastructural facilities in promoting rural development in Imo State. The study used primary data sourced through questionnaire administered to respondents in eighteen communities of the state. Findings from the study revealed that the presence of infrastructure in the state has a significant effect on economic activities in the state.

Meanwhile, Ashagidigbi, et.al. (2011) investigated the effect of infrastructure on farmers productivity in Osun state, using multistage random sampling procedure to source for primary data. The findings from the study shows that fertilizer, farm size and distance to major roads are the major determinants of farmers' productivity in the area.

Achjar and Panennungi, (2009) examine the impact of the rural infrastructure on rural poverty reduction, using a probit model on data obtained from six districts in Indonesia. The findings show that good roads in the rural community and the level of education level of household's head tend to reduce the probability of the household being poor. It implies that, both physical and non-physical infrastructure (human capital) in the rural community have a significant impact on poverty reduction in the area. Furthermore, it reveals that rural infrastructure development, whether physical (roads, bridges, electricity, irrigation, among others) or non-physical (education and health), will not only improve the rural economy, but also plays a direct and indirect role in reducing poverty.

Methodology

Area of Study

Kaduna State was founded in 1976, when the then North Central State with capital at Kaduna was renamed Kaduna State. It shares common borders with Zamfara, Katsina, Niger, Kano, Bauchi, Nasarawa, Plateau States, and the Federal Capital Territory. The total landmass of the State is estimated at 46,053 sq km which is about 5% of the total land area of Nigeria. It has Rivers Kaduna, Kogum, Gurara, Matsirga and Galma as the major rivers in the state.

The population of the state according to 2006 census stands at 6,113,503 with the majority of the people living in urban and semi urban towns in the state. The rural population is estimated at 3,682,034 (2006 Census). The economy of Kaduna state is mainly agriculture with the majority of the people actively engaged in farming and agribusiness. Some of the population also involve livestock such as poultry, cattle, sheep, goats and pigs (KSG, 2013).

Research Design

The descriptive research design was used in this study, and the survey method was adopted since it is considered suitable for the study because it is a very valuable tool for assessing opinions and trends. It consists of a predetermined set of structured questionnaires built on 4-point Likert scale to collect information from a representative sample of the population of selected rural communities in Kaduna State. However, it would be unrealistic to study this large group of people whose population may be undetermined due to inaccessibility of information. Therefore, using Taro Yammanne method of finite size sample determination, a sample of 399 respondents was randomly selected from the population across rural communities in the state. The study utilized mainly primary data obtained through the administration of structured questionnaire.

Model Specifications

The model for the study is adapted from the work of Palei (2015) who observed that the competitiveness of a nation is influenced majorly by the level of its institutional development and the state of its infrastructures. The level of infrastructure itself is determined by the quality of roads, railroad infrastructure, air transport and electricity supply. Based on his findings, the model is represented thus:

$$Y = f(\text{Ifr}) \dots\dots\dots (1)$$

$$\text{Ifr} = f(\text{RN}, \text{Rr}, \text{AT}, \text{ES}) \dots\dots\dots (2)$$

Substituting equation (2) in equation (1):

$$Y = f(\text{RN}, \text{Rr}, \text{AT}, \text{ES}) \dots\dots\dots(3)$$

Where:

Y = Global Competitiveness

Ifr = Infrastructure

RN = Road Network
 Rr = Railroad
 AT = Air transport
 ES = Electricity Supply.

In the context of this study, competitiveness of a nation is substituted for rural economy and in line with the objective of the study, the model is therefore modified thus:

Model I: Effect of Socio-Economic Infrastructure on Rural Economy:

$RE = f(SEI)$ (4)

$SEI = f(RN, EL, MT, TCN)$ (5)

Substituting equation (5) in equation (4):

$RE = (RN, ES, MT, TCN)$ (6)

Modifying equation (6) in stochastic form as:

$RE = \beta_0 + \beta_1 RN + \beta_2 EL + \beta_3 MT + \beta_4 TCN + \mu$ (7)

Where:

RE represent Rural Economy
 SEI represent Socio-Economic Infrastructure
 RN represent Road Network
 EL represent Electricity Supply
 MT represent Market Infrastructure
 TCN represent Telecommunication Network

Empirical Results and Discussion

The results of descriptive analysis are reported in this section.

Table 1. Results of descriptive analysis

Variable	Observation	Mean	Standard Deviation.	Minimum	Maximum
RE	300	3.298	.568	1.3	4
RN	300	3.443	.590	1	4
EL	300	3.388	.626	1.3	4
MT	300	2.985	.721	.6	4
TC	300	3.134	.559	1.3	4

STATA 13 Outputs

The descriptive statistics shown in Table 1, reveals that variables Rural Economy (RE), Electricity Supply (EL) and Telecommunication (TC) have a mean of about 3, with minimum of 1.3 and maximum of 4. Road Network variable has a mean of about 3.4 with minimum of 1 and maximum of 4, while Market infrastructure variable has a mean of about 3 with minimum 0.6 and maximum of 4. The standard deviations of all the variables are less than one, indicating that the individual responses are concentrated around the mean. In other word, they are less than one point away from the mean. Meanwhile, the MT is rated least of all the variables with a mean of 2.99, Minimum and Maximum at of 0.6 and 4 respectively. However, the standard deviation at about 0.7, is also clustered around the mean.

Table 2. Results of correlation analysis

	RE	RN	EL	MT	TC
RE	1.000				
RN	0.491* 0.000	1.000			
EL	0.472* 0.000	0.543* 0.000	1.000		
MT	0.363* 0.000	0.197* 0.006	0.312* 0.000	1.000	
TC	0.432* 0.000	0.371* 0.000	0.435* 0.000	0.495* 0.000	1.000

STATA 13 Outputs

The results of correlation analysis in Table 2 reveals Rural Economy (RE), with a coefficient of 0.491 has a positive and moderate relationship with Road Network (RN). The p-value of 0.000 shows that the relationship is statistically significant. More so, with a moderate correlation of 0.472 and p-value of 0.0000, the results further reveal a moderate positive and statistically significant relationship between Electricity (EL) and Rural Economy. Market Infrastructure (MT), with a coefficient of 0.363 and p-value of 0.0000 signifies a moderate positive and statistically significant relationship with Rural Economy, while Telecommunication (TC) also shows a moderate positive and statistically significant relationship with National security, with a coefficient and p-value of 0.432 and 0.000 respectively.

Meanwhile, the coefficient value of all the variables indicates absence of multicollinearity among the independent variables that would have weakened the precision of the estimate coefficient, which might in turn affect the statistical power of the regression model. To further confirm absence of correlation among the independent variables, a multicollinearity test is conducted.

Table 3. Results of VIF & Tolerance Level

Variable	VIF	1/VIF
EL	1.51	0.663298
TC	1.46	0.684577
RN	1.41	0.707662
MT	1.30	0.769175
Mean VIF	1.42	

STATA 13 Outputs

The results of the multicollinearity test in Table 3 reveals that the VIF for all the variables is closer to 1, which is an indication that there is absence of high correlations among the independent variables. Hence changes in any of the variable cannot be attributed to shifts in another variable. The result confirms the absence of correlation shown in the results in Table 2.

Table 4. Results of reliability test using Cronbach Alpha

Item	Observation	Sign	item-test correlation	item-rest correlation	average interitem covariance	Alpha
RE	300	+	0.746	0.526	.150	0.711
RN	300	+	0.702	0.522	.158	0.734
EL	300	+	0.758	0.589	.143	0.710
MT	300	+	0.683	0.440	.157	0.772
TC	300	+	0.744	0.594	.151	0.712
Test scale					.152	0.770

STATA 13 Outputs

The Cronbach Alpha test shows the internal consistency or the reliability of the data. The results in Table 4 show alpha coefficient of the variables to be 0.770, suggesting that the variables have internal consistency, and can be affirmed to have good reliability. The implication of which shows that the test actually measures the effect of all the independent variables (RN, EL, MT and TC) on the Rural Economy (RE).

Table 5. Results of regression analysis

RE	Coef.	Std. Err.	T	P>t	[95% Conf.	Interval]
RN	.285	.054	5.26	0.000	.178	.391
EL	.173	.053	3.26	0.001	.069	.277
MT	.132	.042	3.11	0.002	.049	.216
TC	.159	.059	2.70	0.007	.043	.274
_cons	.840	.192	4.37	0.008	.461	1.218
Prob > F = 0.000						
R ² = 0.3636						
Adj R ² = 0.355						

STATA 13 Outputs

$$RE = \beta_0 + \beta_1 RN + \beta_2 EL + \beta_3 MT + \beta_4 TC + \mu$$

$$RE = 0.840 + 0.285EL + 0.173MT + 0.132MT + 0.159TC$$

(4.03) (4.42) (3.13) (2.90) (2.76)

The results in Table 5 reveal the effect of Socio-economic infrastructure on Rural Economy in Nigeria. The results reveal F-stat value of 0.0000, indicating a very good fit for the regression model, and all the variables (RN, EL, MT and TC)' coefficients are jointly statistically significant. Furthermore, the R-Square indicates that about 36.4 percent of the variation in rural economy can be explained by factors in the model, while about 63.4 percent can be attributed to other factors outside the model.

Furthermore, the results also reveal that Road Network (RN), with a coefficient of 0.285, t-stat of 5.26 and p-value of 0.000, has a positive and statistically significant impact on the rural economy. It implies that one percent improvement on road infrastructure tends to improve rural economy by about 0.29 percent, provided all other factors remain constant.

More so, electricity supply (EL) shows a coefficient of 0.17, a t-value of 3.26 and p-value of 0.001, which implies that electricity infrastructure, has a positive and statistically significant effect on rural economy. With one percent improvement in electricity infrastructure, the rural economy tends to rise by about 0.17 percent provided all other factors remain constant. Meanwhile, Market infrastructure shows a coefficient of 0.132, t-value of 3.11 and p-value of 0.002 indicating that market infrastructure has a positive and statistically significant effect on rural economy. By implication, if other factors remain unchanged, a percent improvement in market infrastructure in the rural area, the rural economy tends to increase by about 0.13 percent.

Meanwhile, the result also reveals that Telecommunication infrastructure (TC) shows a coefficient of 0.159, t-stat of 2.70 and p-value of 0.007. This indicates that Telecommunication infrastructure (TC) has positive and statistically significant effect rural economy. All other factors being constant, one percent improve in telecommunication infrastructure tends to lead to about 0.16 percent growth in rural economy.

Discussion of Findings

The results from data analysis indicate that socio-economic infrastructure in the rural areas has a positive and statistically significant effect on the growth of the rural economy in Kaduna State, Nigeria. The result agrees with *a priori* expectation. All the infrastructure: road infrastructure, electricity supply, market infrastructure and telecommunication infrastructures that are considered in the study, showed a strong effect on rural economy. These infrastructures tend to improve the productivity of the rural sector and consequently improve the rural economy. The results agree with the findings of Oguzo (2011), who observed that social infrastructure in Imo State enhanced economic activities.

Road infrastructure in the rural area has a statistically significant effect on the growth of the rural economy. Good road network is expected to open-up rural areas for easy access and movement of goods from the producers in rural area to the final consumers in the urban centres and other parts of the country. It also helps to facilitate input supplies to the industrial sector, that will in turn increase the productivity, thereby leading to the growth of the rural economy. The finding agrees with the findings of Achjar and Panennungi, (2009) who observed that rural physical infrastructures development like roads, bridges, electricity and irrigation improve rural economic capability.

Electricity supply in the rural area is found to be statistically significant in explaining rural economy in Kaduna State, Nigeria. This is not unconnected with the fact that electricity infrastructure is key to the growth of any economy. It is very essential in almost every aspect of economic activities, particularly where all the machines and other modern technologies used in the process of

transforming raw materials to finished or semi-finished goods use electricity. Hence the growth of the economy is determined by increase in output, and output itself is affected by electricity supply, therefore, it can be affirmed that electricity supply is very significant in the growth of rural economy.

Market is any set up that facilitates transactions in economy, whereby potential buyers and sellers meet to exchange goods or services. In the rural communities, it is usually a physical location where economic agents gather to exchange products of their economic activities including buying and selling. Though, in the modern world, a market is no more just a meeting point for buyers and sellers, rather it represents a set of all the potential buyers and sellers in an environment. In whichever way it is perceived, market infrastructure has proven to be essential for the growth of the rural economy. A production is said not to be complete until the products or goods get to the final consumers, and one of the means through which the products can be accessed by the consumer is the market. Hence, market infrastructure is significant in explaining the growth of the rural economy.

The results also indicate that telecommunication in rural areas has a positive and statistically significant impact on the rural economy in Kaduna State, Nigeria. Telecommunication infrastructure like telephone networks, mobile phone networks, and internet service can help to accelerate the growth of the rural economy. For instance, the internet can be used as a powerful information and sales channel by the producers to augment their geographical outreach, to promote their products to potential consumers worldwide. Through developing a website, even the small-scale entrepreneurs can list their products, services and other information of interest to potential consumers. In the same vein, the consumers, through the internet, can practically have access to greater information practically anything from anywhere. Hence, buyers with ease, can place and receive orders online from varieties of available goods and services from anywhere in the world.

Conclusion and Recommendations

The objective of this paper is to establish a model that explains the effect of socio-economic infrastructure on rural economy and specifically to assess the effect of road infrastructure, electricity, and market infrastructure and telecommunication infrastructure on rural economy in Kaduna State, Nigeria. Based on the results obtained from analysis of the primary data collected from the study area, it is observed that each of the road network, electricity, market and telecommunication infrastructures is statistically significant in explaining rural economy, particularly in Kaduna State of Nigeria. Hence, it can be succinctly concluded that socio-economic infrastructure development in the rural areas has a positive effect that is statistically significant on rural economy. Given the foregoing, the study therefore, recommends thus:

- 1) Construction of new roads and the repair works of the existing ones in the rural areas should be carried out by the state government, to create easy access to raw materials in some of these rural areas, to facilitate easy movement of goods or products from the rural communities to markets in urban centers.
- 2) Availability of efficient electricity will stimulate the growth of small-scale industries like food processing, flour mills, among others in the rural areas. Hence, the government must ensure that its rural electrification programme get to the grassroot, especially the villages to stimulate the growth of the rural economy.
- 3) Market infrastructure is one of the means through which rural producers can get their products across to the consumers in exchange for money and also a means of obtaining essential goods or services for necessary their wellbeing. Hence the government should establish standard agricultural markets in the rural communities. This will make it easier for the rural dwellers to move their products from the farm to the market and also encourage urban-rural movement rather than rural-urban movement.
- 4) Furthermore, the government should extend information and communication technology networks to rural areas to help in connecting the rural areas to the urban centers. Provision of communications infrastructure like mobile phone and internet networks in these communities will help the rural producers to market their products to the outside world, and also have access to other information or services that may assist in improving their productivity.

References:

1. Adeniyi, J.O., Akinrimide, Y. and Abiodun, A.L. (2018). Analysis of road transportation impact on rural development in Nigeria: A study on Akure North Local Government Area, Ondo State. *International Journal of New Technology and Research (IJNTR)* 4(3), 102-110.
2. Aigboka, B. E. (1999). Evaluating investment on basic infrastructure in Nigeria. *Proceedings of the Eighth Annual Conference of the Zonal Research Units (Organised by Research Dept. Central Bank of Nigeria, at Hamdala Hotel, Kaduna, 11 –15 June, 1999)*, p.208
3. Ashagidigbi W. M, Falusi, A.O. and Awopeju, S.O (2011). The Effects of Rural Infrastructure Development on Crop Farmer's Productivity in Osun State. *World Rural Observations*, 3(1):48-58].
4. Daud, S. A., Omotayo, A. O., Aremu, A. O., & Omotoso, A. (2018). Rural infrastructure and profitability of food crop Production in Oyo

- State, Nigeria. *Applied Ecology and Environmental Research* 16(4):4655-4665.
5. European Commission, (2000). *Agriculture's Contribution to Rural Development*. International Conference on Non-Trade Concerns in Agriculture Ullensvang, Norway, 2-4 July 2000.
 6. International Labour Organisation, (2008). *Rural Economy*. <https://www.ilo.org/global/topics/dw4sd/themes/rural-economy/lang-en/index.htm> ILC. Report of the Committee on Rural Employment. Geneva : ILO, 2008.
 7. KDSG (2013). *State development Plan. 2014-2018*. Ministry of economic planning publication.
 8. Luis Enrique Rojas-Ramírez and Alejandro Molina-Vargas (2018). *Public infrastructure and its importance for economic growth: the case of Oaxaca (Mexico)*. *ecos.econ. vol.22 no.46* Medellín. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1657-42062018000100004
 9. Nuzul Achjar & Maddaremmeng A. Panennungi, (2009). *The Impact of Rural Infrastructure Development on Poverty Reduction in Indonesia*. *Economics and Finance in Indonesia*, 57, p.339-348.
 10. Oguzor, N.S. (2011). *A spatial analysis of infrastructures and social services in rural Nigeria*. *GeoTropico*, 5 (1), Artículo 2: 25-38.
 11. Olufemi, E.A., Olatunbosun, A..J., Olasode, O.S. &I.G. Adeniran (2013). *Infrastructure development and its effect on economic growth: The Nigerian Perspective*. *European Scientific Journal*, 9 (31) ISSN: 1857 – 7881
 12. Palei, T. (2015). *Assessing the impact of infrastructure on economic growth and Global Competitiveness*. *Procedia Economics and Finance* 23 (2015) 168 – 175
 13. Rahman, S. (2014). *Impact of rural infrastructure on farm and non-farm enterprise choice and income in Bangladesh*. *The Journal of Developing Areas*, 48(1), 275-290
 14. Reddy N. (2018). *Economic Infrastructure – Intro, Types, Significance*,. <https://www.toppr.com/bytes/economic-infrastructure/>
 15. Saheed, Z.S. (2014). *Impact of agricultural credit guarantee scheme fund (ACGSF) on domestic food supply*. *British Journal of economics, management and trade*. 4 (8), 1273 – 1284.
 16. UKEssays. (2018). *Economic and Social Infrastructure*. <https://www.ukessays.com/essays/economics/economic-and-social-infrastructure-economics-essay.php?vref=1>
 17. UNDP (2012). *Rural development for developing economies*. The United Nations Development Programme, Washington DC.



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Developing Sports for Economic Growth and Development in Developing Countries

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Abstract

Many developing countries still struggle to industrialise to speed up the pace of economic growth and development. Given this, they continue to search for antidotes to the challenges of their underdevelopment. Sports development is touted by many as one of the antidotes to the underdevelopment challenges of developing countries. However, the major challenges developing countries face in recent times are how they can develop sports and how they can adequately harness its benefits for economic growth and development. This paper sought to holistically explore the challenges of sports development in developing nations, the long-term complementary strategies or cardinal pillars of sports development in developing nations, and the benefits of sports development and their effects on economic growth and development of developing nations. This paper employed a narrative overview research approach to arriving at its conclusions. It concludes that sports development hinges on the holistic development of ten long-run complementary strategies or cardinal pillars. In addition, sports development offers eight significant benefits that can help achieve economic growth and development in developing nations. One of the study's main recommendations is that sufficient and sustained levels of all kinds of investment in sports, coupled with strong institutions, good governance, and practical and interrelated policies, are critical for sports development and economic growth and development in developing countries.

Keywords: Economic Growth And Development, Sports Development, Service Sector Development, Linear Stages Of Economic Growth, Developing Nations, Narrative Overview

Introduction

Economic growth refers to an increase in the amount of an economy's output of goods and services produced in a particular year relative to the previous year's output. Economic development may also refer to the improvement in the quality of human life emanating from a very long period of economic growth. According to Krueger & Myint (2016), economic development is the process whereby a low-income economy grows over a long period into a modern industrial economy involving qualitative and quantitative improvements in the country's economy. Many factors contribute to economic growth and development. The development experience from the 1950s to the 1970s influenced the thoughts of development economists like Gustav Cassel (1924); Roy F. Harrod (1939); Evsey Domar (1946); Moses Abramovitz (1956); Robert Solow (1957); Walter W. Rostow (1960s) and E. F. Denison (1964). These economic development exponents argued that an adequate level of finance, sufficient and sustained levels of all kinds of investments, higher productivity growth, innovation, technological capabilities of firms, strong institutions were sufficient for economic growth in developing countries. They mentioned other factors such as good governance, quality education, quality of human capital, and active government policies (Sagasti, Bezanson, Prada, Blockus, Casabonne, Teresa & Salop, 2005; Todaro & Smith, 2006). The three main sectors that grow and develop every economy are the agricultural, industrial, and service sectors. Each sector's contribution to a country's economic growth and development at any point in time depends on the level of that country's development. At the early stages of an economy's life, the agricultural sector contributes relatively more to GDP growth than the other two sectors. It, however, gives way to the industrial sector over time in terms of its share in GDP growth. Finally, as the economy becomes developed, the service sector outperforms both the agricultural and industrial sectors in contribution to GDP growth. The stage of economic development where the service sector dominates an economy is known as "the service economy". The dominance of the service sector in economic activities results in rising employment levels and an increased share in GDP (Witt & Gross, 2019). Kim (2006) added that during this structural transformation in an economy, the share of service in production, employment, consumption, international trade, and intermediate inputs used for other industries' production increases.

Economic theory and economic development experiences of the developed world, starting with Britain, explain that countries that develop are those that place more emphasis on industrialisation throughout their

development paths. It presupposes that developing countries that want to develop must industrialise. According to Martorano, Sanfilippo & Haraguchi (2017), industrialisation is one of the critical elements of long-term economic growth in developing countries. They explain that it is because of the manufacturing sector's capacity to absorb workforce, enhance diversification and structural transformation, and at the same time promote the growth of other sectors through intersectoral linkages. Economic conditions, factor endowments, and country characteristics such as demographic structure and geography promote industrialisation. Tafirenyika (2016) argued that industrialisation could bring prosperity by creating new jobs and better incomes for all. The UN Economic Commission for Africa (ECA) stated that the contribution of Africa's manufacturing sector to the continent's gross domestic product declined from 12 per-cent in 1980 to 11 per-cent in 2013 (Tafirenyika (2016). Norbrook (2021) also compares the manufacturing sector's performance in Africa with that of China and other countries. He points out that on the continent of Africa, manufacturing has grown at 2.5 per cent over the past 20 years relative to the 15 per-cent and 20 per-cent growth rates recorded by China and other countries, including Vietnam. In the 1970s, the industrial sector in Africa contributed a fifth (20 per-cent) to gross domestic product (GDP), but it now contributes only a little over a tenth (10 per-cent) to Africa's GDP. The director of globalisation, the United Nations Conference on Trade and Development, Richard Kozul-Wright, is captured to have referred to this development as premature de-industrialisation.

There are many reasons for the decline in the performance of the industrial sector in Africa. In Tafirenyika (2016), one can read that Africa's leaders have failed to pursue bold economic policies out of fear of antagonising donors. Again, African leaders have also failed to spend the high commodity prices' windfalls on productive investments but instead used them to pay high salaries to public sector workers. Furthermore, Nzau (2010) argued that a bad political culture, weak political and social institutions, poor leadership, and bad governance seem to have contributed to the less industrialised state of African countries. Again, development partners' efforts to promote industrialisation in Africa through financial, logistical and technical aid became a plan to produce jobs for westerners in the name of expatriates and find a market for their exports (imported by African states as capital goods). Also, it is to continue exploiting the African economy on behalf of Western powers that essentially control them. In sum, several countries in the developing world still struggle to industrialise because of unfavourable social, economic, political, cultural, human, and natural conditions and a lack of technical skills. Among the questions that now bother the minds of the connoisseurs of industrialisation and economic growth and development in African, including McKinsey's Africa region chair, Acha Leke, are: Should

Africa look at a different model of economic development? Should Africa jump over the traditional path of economic development into services? (Norbrook, 2021).

Under these deficiencies in developing nations' pursuit of industrialisation, each nation and region needs to assess its strength and weaknesses in promoting industrialisation. One must bear in mind that industrialising developing nations do not sufficiently provide the magic wand for their economic transformation. Therefore, they must develop economic subsectors that can help promote economic growth and development faster to reduce the unemployment rate among the youth when adequately harnessed. One of such subsectors is the sports sector. The sports sector is a labour-intensive sector, so it can help promote economic growth faster at relatively low costs in developing nations. The government and the private sector must give it sufficient attention for it to develop. The large populations of their unskilled underemployed and unemployed youth, most of whom can resort to social and political vices, can also be absorbed by the sports sector. According to the World Bank, the youths in Africa account for about 60% of Africa's unemployed population (Ighobor, 2017). The African Development Bank Group (2018) also estimated that each year, ten (10) to twelve (12) million young Africans join the job market. Also, Vinicius Pinheiro, the Regional Director of the International Labour Organisation, revealed 9.4 million unemployed young people and more than 30 million who only got informal employment in Latin America and the Caribbean. The situation was not good and could become more complicated by the effects of COVID-19 (International Labour Organisation, ILO, 2020). Furthermore, the International Labour Organisation (2020) added that more than 700 million young people in Asia-Pacific accounted for almost half the Asia-Pacific's joblessness. Without sufficient numbers of new and decent job opportunities created by governments in developing countries, there will be a compromise of the regions' social and economic growth potential. Harnessing the increased youth population could support increased productivity and inclusive, sustainable economic growth and development across the regions.

Sports have become like a religion due to the passion with which people follow them. Because of their love for sports, many sports fans jubilate over victories chalked by their teams, heroes, and heroines inside and outside sporting facilities. They parade themselves on the principal streets and at entertainment centres during and after major sporting events. Also, sports fans of many countries have mourned the loss of games and trophies by both clubs and national teams for a very long time. One can remember the 2010 FIFA World Cup tournament in South Africa, during which Ghana's striker Asamoah Gyan missed a last-minute penalty kick against Uruguay. The goal would have sent Ghana into the semifinals stage of the tournament. That would

have made Ghana the first nation to have achieved that feat in the history of African football at the apex of world football. To date, many football-loving Ghanaians look back with great disappointment.

Many sports fans have died through fans hooliganism, vehicular and air disasters. Others, too, have been maimed for life. These unfortunate people and their families have become impoverished without any hope for the future. Despite the dark sides of sports, sports development offers many benefits that can lead to economic growth and development in developing countries when adequately harnessed. For this reason, governments, researchers, policy-makers, sports administrators, entrepreneurs, and development partners have put in frantic efforts to explore the ways through which they can develop sports in developing nations. Developing sports will make the sector one of the major subsectors of the economies of developing countries. Allah (2018) tells us that understanding the link between sports and economics can increase developing nations' knowledge of how they can use sports to promote economic development. Unfortunately, sports are underdeveloped in developing countries. In the words of Kakonge (2016), though sports have essential benefits, it is an area that is underdeveloped and underfunded, especially in Africa.

The motivation behind this paper is that some researchers have dwelt on factors that negatively affect sports development making the sector unattractive to the youth and other stakeholders. A few other researchers also have delved into some segments of the factors that contribute to sports development and the effects of sports development on economic growth and development. Among them are Maguire (2018); Xiong (2007, cited in Hallmann, Wicker, Breuer, & Schönherr, 2012); Panagiotopoulos (2013);, KPMG (2016); Bu'ch (2005); and Heinemann (1998, cited in Hallmann, Wicker, Breuer & Schönherr, 2012); Chappelet (2010); Shank (2019, cited in Greenwell and Thorn, 2012); and Diop (2016)]. Generally, sports stakeholders have paid little attention to the challenges developing nations currently face in developing sports. Also, they have given little consideration to how developing nations can develop sports to make the sector one of the major subsectors that will contribute to their economic growth and development. Furthermore, they give little attention to how developing nations can exploit the numerous benefits of sports development to help them achieve economic growth and development.

With regards to these gaps in the literature that the authors reviewed, this paper sought to:

- a. Explore the reasons for the underdevelopment of sports in developing countries.
- b. Explain in a holistic and synchronised manner the long-term complementary strategies or cardinal pillars of sports development, the

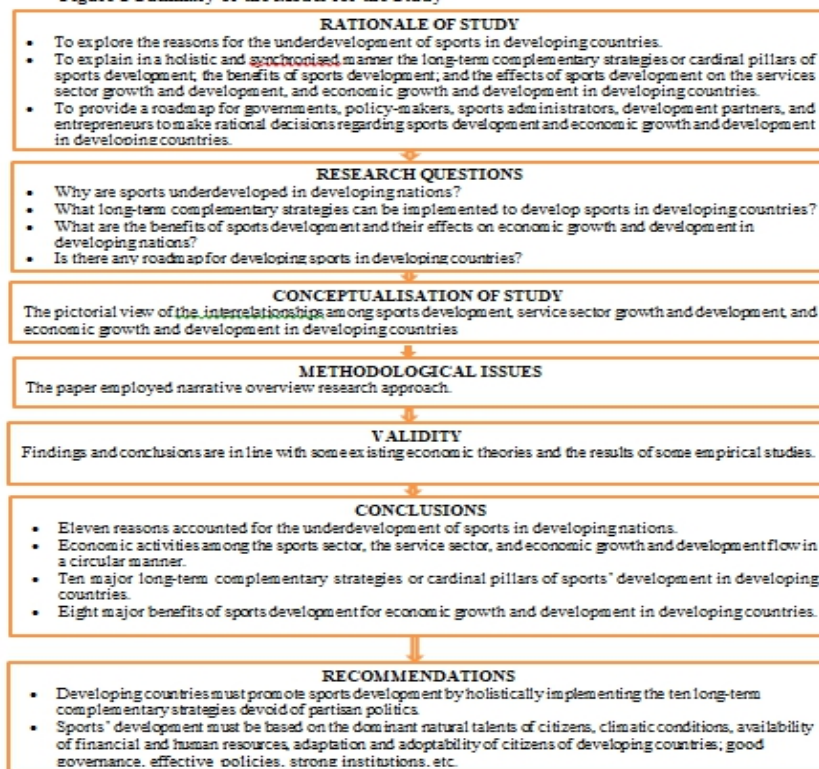
benefits of sports development, and the effects of sports development on the service sector growth and development and economic growth and development in developing countries.

- c. Provide a roadmap for governments, policy-makers, sports administrators, development partners, and entrepreneurs to make rational decisions regarding sports development and economic growth and development in developing countries.

Significantly, this paper will help governments, international sports associations, policy-makers, sports administrators, entrepreneurs, and other stakeholders work hand-in-hand to develop sports in developing countries to promote their economic growth and development. Again, it will provide extensive literature and possible research gaps for future researchers in the sector to exploit. It may also disabuse people of the notion that sports are for the academically disadvantaged youths.

The rest of the paper proceeds as follows: Section 2 duels on literature review. Section 3 explains the conceptual framework. Section 4 presents the methodological issues for the study. Section 5 is devoted to discussions of the three main objectives of the study. Finally, Section 6 highlights the conclusions and recommendations emanating from the study. Figure 1 summarises the model that guided the study.

Figure 1 Summary of the Model for the Study



Source: Author's Own Construct, 2021

Literature Review

Section 2 is devoted to the literature on the theories of ‘the service economy’ and Walt Whitman Rostow’s linear stages of growth.

Theories of “The Service Economy”

Allan George Barnard Fisher, a New Zealand economist, pioneered the dominant sequential contributions of the primary, secondary, and tertiary sectors to economic growth and development. He classified economies by the proportion of their labour force employed in the three sectors. Primary production included agriculture, pastoral production, fishing, forestry, hunting, and mining. Secondary production consisted of manufacturing and construction. Again, tertiary production comprised transportation, communications, trade, government, and personal services (Haksever & Render, 2013; Acquah-Sam, 2020). Today, these sectors are also called the agricultural sector, the industrial sector, and the service sector. At the early stages of an economy's life, the agricultural sector contributes relatively more to GDP than the other sectors. It, however, gives way to the industrial sector over time in terms of its share in GDP. Finally, as the economy develops, both the agricultural and industrial sectors shares in GDP reduce while the service sector's share in GDP increases significantly. This development is called “the service economy”. Witt & Gross (2019) wrote that the dominance of the service sector as an economy develops results in rising employment levels and a higher share in the growth of GDP. The following theories explain the leading role of the service sector in economic development:

- *Intersectoral linkages among economic sectors*: Intersectoral linkages promote the dominant role of the service sector in economic development. The agricultural sector becomes more dependent on the service sector for growth by using more resources produced by the service sector. In the age of growth in information and communication technology, financial sector growth and development, improved transportation, improve healthcare, etc., the demand for service sector goods and services by the population and the agricultural sector and industrial sector increases.
- *The traditional view*: The traditional view of “the service economy” posits that consumption structure changes from consumable goods to services as incomes grow (Fisher, 1935; and Clark, 1940, cited in Kim, 2006). Economic development is akin to high-income levels. The income elasticity of demand for durable consumable goods is less than one (income inelastic), and the income elasticity of demand for services that are high-grade goods is greater than one (income elastic). Thus, as personal disposable incomes rise, higher percentages of the rising personal disposable incomes are initially spent on durable consumer

goods such as housing, automobiles, and household appliances. Usually, households spend a further higher percentage of increases in personal disposable incomes on education, healthcare, vacations, entertainment, sports, etc. This consumption pattern leads to the growth of the service sector. The result is that the service sector's share in GDP and employment increases as more resources flow into the sector to meet the rising demand for services driven by higher income growth.

- *The cost disease hypothesis*: The cost disease hypothesis also talks about the higher growth rate of the service sector prices, rather than prices in the manufacturing sector through time (Baumol, 1967; Baumol et al., 1985, cited in Kim, 2006). Thus, the cost disease hypothesis argues that the shift to service is attributable to the transfer of resources from manufacturing to services due to a productivity gap between the two sectors. Baumol (2004) explained that the cost disease deals with the tendency of costs and prices of services such as healthcare, education, legal services, and live artistic performance to rise persistently and cumulatively faster than the rise in the general price level. Also, Maiello (2017) wrote that the cost disease explains why prices for the services offered by professions whose output cannot be quantified keep rising even though the productivity levels of the workers in those professions or industries have not simultaneously or necessarily increased. Examples are education, health care, and the arts. Ghavidel & Sheshkalany (2017) reported two reasons for the cost disease to occur from the supply-side in an economy. The first is when the growth rate of total factor productivity and technological progress in services is less than manufacturing. The second is when the elasticity of substitution between labour and raw materials in the services production function is large, and elasticity of substitution in manufacturing production function is small. For the demand side, they explained that the cost disease occurred if the growth rate of income elasticity of service was more than that of the manufacturing sector over time.
- *The exogenous demand shocks hypothesis*: The exogenous demand shocks hypothesis postulates that the shift to “the service economy” results from structural changes in an economy that move the demand curve for service outward. The proportion of service industries rises as service activities that used to produce within manufacturing firms' boundaries in the past are spun off to and outsourced from external service-providing specialists (Raa & Wolff 1996, Fixler & Siegel, 1999; cited in Kim, 2006). A sudden change in a variable outside the aggregate demand (AD) model causes an exogenous demand-side shock. An example of exogenous shock is a sudden change in the exchange rate

because the exchange rate is not an independent variable in the AD equation.

- *The de-industrialisation hypothesis*: De-industrialisation refers to a decrease in the share of the industrial sector in GDP and employment. Generally, de-industrialisation decreases the size and importance of the industrial sector in an economy. De-industrialisation is brought about in an advanced country as labour-intensive manufacturing industries are transferred to less developed countries. That expands the trade between them (Wood 1995; Freeman, 1995; cited in Kim, 2006).

The Linear Stages of Economic Growth and Development

Walter W. Rostow penned the stages of growth and development in 1960. The model asserts that both developing and developed countries exist somewhere on this linear growth path at some point in time and climb upward in their development processes. The linear stages of growth are underpinned by growth in domestic savings, capital accumulation, and investments in productive sectors by an economy. An economy looks outwardly for foreign aid, grants, and foreign direct investments when the domestic capital accumulated is insufficient to undertake the investments necessary and sufficient for economic growth and development. The idea gained recognition through the success story of the Marshall Plan, which helped in the reconstruction of most European countries after the Second World War. These linear stages of growth are the traditional society, the preconditions for take-off, the take-off, the drive to maturity, and the age of high mass consumption. According to Jacobs (2020), Singapore is an example of a country that grew in Rostow's prescribed pattern postulated. He explained that at its independence in 1965, Singapore did not show any unique prospects for growth. However, because of its early industrialisation (developing profitable manufacturing and high-tech industries), it has become a developed country and one of the major players globally. It has a higher per-capita income than many European countries.

Torodo & Smith (2006), Rostow (2012), Haksever & Render (2013), Jacobs (2020), and Debasish (n.d) explain Rostow's linear stages of growth. The stages of growth are the following:

- *The traditional society*: The traditional society is a subsistent agricultural-based economy with a labour-intensive method of production. Due to the low output levels among households, they sell very little of what they produce to generate incomes to purchase the things they do not directly produce. The traditional stage is alienated from modern scientific and world technologies. The economy depends on the seasons, the rains, and the nature of the soil. The low productivity and large population result in significant underemployment of resources.

- *The preconditions for take-off:* At the preconditions for the take-off stage, there is little dependence on agriculture compared to the traditional society because the industrial and service sectors are in the process of development. In this stage of economic development, society begins to develop manufacturing enterprises and more exports of excess produce. International linkages begin to develop between the domestic economy and the rest of the world. The government seeks to invest more in social overhead infrastructural facilities such as rail, roads, hospitals, dams, electricity, schools, etc. The savings and investment rates are likely to be below 5 per-cent of an economy's net national product or income. The country imports more finished goods and services for direct consumption and capital goods and machinery to produce goods and services, but it exports mainly raw agricultural materials, minerals, and semi-finished goods. Economic management and social life become mechanised and more efficient than in the traditional society. Machines and the energy that powers them replace muscle power in production. The productivity of the factors of production (the art of producing more goods and services with fewer amounts of resources) increases significantly. Economic goals are optimised, and division of labour increased. Technological advancements lead to new, faster, and more specialised machines that constantly improve productivity and replace more workers. The population's quality of life begins to improve as people begin to have access to more goods and services to consume.
- *The take-off:* The take-off stage is a short period of intensive growth in which industrialisation begins to occur. Workers and institutions become concentrated around a new industry. The take-off stage is akin to an industrial revolution because of the radical changes in production methods (from the workshops to the factories). The radical changes impact positively on productivity in a relatively short time. The period spans about 20 to 30 years, during which the growth process. This rapid and becomes self-sustaining, and the country becomes self-reliant. The economy develops without external assistance. The reason is that productive investments rise from about 5 per cent or less to at least 10 per cent of national income.
- *The drive to maturity:* The drive to maturity stage occurs over a long period of sustained economic growth, usually beyond forty years. Standards of living and the use of modern technology increase, and the national economy grows and diversifies because the society effectively applies the range of modern technology to the bulk of its productive resources. New production techniques take place over the old ones. The savings and investment rates reach a level that provides a catalyst for the automatic attainment of economic development. Also, there is an

increase in urbanisation and a change in the composition of the country's foreign trade. Again, there are increases in the exports of nontraditional goods and processed goods. Labour becomes technically skilled, giving rise to higher real wages and living standards. There is also a change in the character of entrepreneurship, where new classes of managers who are more polite and efficient emerge. The people get fed up with industrialisation and pursue constant changes toward more service sector activities. The rate of investments goes up from about 10 to 20 per-cent of the increase in national income. At this stage, the growth rate of national income is much more than the growth rate of the population, and that per capita income is high. The reason is that the population follows birth control measures. The country's dependence on other countries falls considerably.

- *The age of high mass consumption*: At this stage, a country's economy flourishes in a capitalist system having the properties of mass production and consumption of goods and services. Rostow associated the Western countries, most especially the United States, with this stage of economic development. According to Haksever & Render (2013), service production dominates economic activities in postindustrial society. Life becomes a game between persons. The country pays Greater attention to information and knowledge acquisition. A person's status or quality of life in society depends on the quantity and quality of services (such as health, education, and recreation) that he/she can afford. Market failures lead to government interventions in market activities at both the national and local levels. Rostow (2012) contended that the balance of attention of the society as it exits the stage of drive to maturity to this last stage shifts from supply to demand, from production problems to consumption problems and welfare problems. This stage is also characterised by the national pursuit of external power and influence. There is the allocation of increased resources to military and foreign policy and the use of the powers of the state, including the power to redistribute income through progressive taxation. The aim is to achieve improved human and social welfare such as increased leisure which the free-market forces of demand and supply could not achieve.

Conceptual Framework

Section 3 explains the conceptual framework of the study. Also, the conceptual framework is the authors' idea and construct emanating from theoretical and empirical reviews. Figure 2 summarises the conceptual framework. It serves as a value addition to the theoretical and empirical literature on the relationships among sports development, service sector development, and economic growth and development. Figure 2 is essential for

the study because the existing theories and empirical works which the author reviewed did not provide a general pictorial view of the above relationships. It will help future researchers to develop empirical models for the study area. Sports contribute positively to service sector growth and development and economic growth and development through the benefits sporting activities offer nations involved in sports. Sports development from the grassroots to the elite levels will help the services sector grow. The service sector growth, in turn, impacts positively on economic growth and development because the service sector is one of the three critical sectors of every economy that contribute to economic growth and development. Figure 2 has five main interrelated sections linked by arrows. These are the long-term complementary strategies or cardinal pillars of sports development, sports development, the benefits of sports development, services sector development, and economic growth and development.

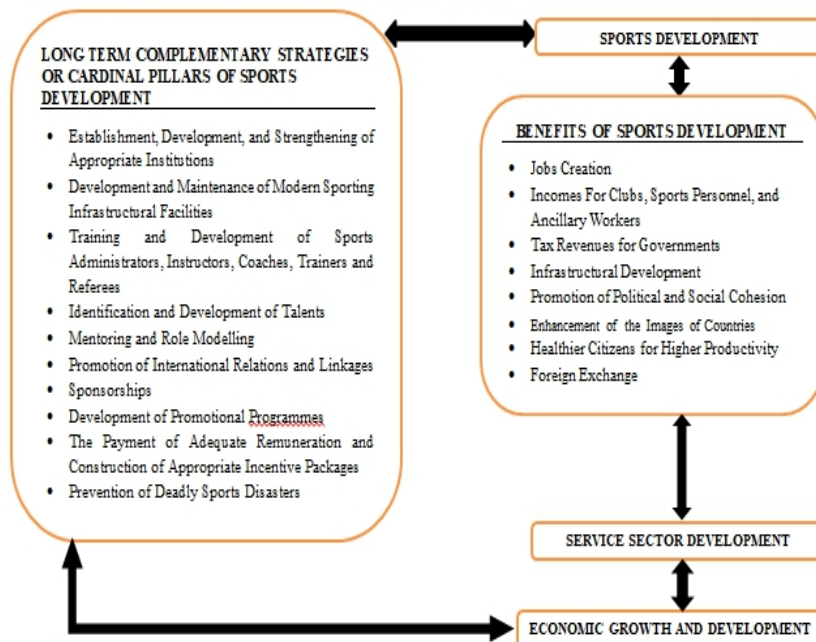
The left-hand side of Figure 2 shows that developing nations can develop sports through ten long-term complementary strategies that serve as its cardinal pillars. The complementary strategies or cardinal pillars of sports development include the establishment, development, and strengthening of relevant institutions; the development and maintenance of modern sporting infrastructural facilities; the training and development of sports administrators, instructors, coaches, trainers, and referees; the identification and development of talents; mentoring and role modeling; the promotion of international relations and linkages; sponsorships; the development of promotional programmes; the payment of adequate remuneration and construction of appropriate incentive packages; and the prevention of deadly sports disasters.

After sports have developed, as shown at the top right-hand side corner of Figure 2, they must, other things being equal, offer eight major benefits to the economy as follows: Jobs creation; incomes for clubs, sports personnel, and ancillary workers; tax revenues for governments; infrastructural development; promotion of political and social cohesion; enhancement of the images of countries; healthier citizens for higher productivity; and foreign exchange. As developing nations harness the benefits of sports, their service sector will grow and develop, which will eventually lead to economic growth and development, as shown at the bottom right-hand side corner of Figure 2. The long L-shaped arrow linking the long-term complementary strategies or cardinal pillars to economic growth and development implies that developing the cardinal pillars of sports development will also directly impact economic growth and development and vice versa.

Andreff (2001) supports the positive and bi-directional relationship between economic development and sports development. He wrote that we could not find a long-run solution to improving sports in developing countries

without ensuring that developing nations made progress toward achieving self-sustained economic growth. He reported the probability that a country will win medals at the Olympics increases with higher GDP per capita and population.

Figure 2 Relationships among Sports Development, Service Sector Development, and Economic Growth and Development



Source: Author's Own Construct, 2021

Methodological Issues

This paper employed a narrative overview research approach for its analysis and conclusions. According to Shah (2018), secondary research publications include narrative reviews, systematic reviews, or meta-analyses. Secondary research publications provide a different perspective on the current literature or additional analysis of the current literature. By this, researchers identify gaps in the current knowledge in a particular field and throw more light on the direction for future studies. A narrative review summarises what is known and highlights either new perspectives or reveals pending questions that remain unanswered or inadequately addressed in a field of study. Bourhis (2018) also posited that a narrative review is a description or the mixing of different ideas to make a whole idea that is different or new without using quantitative methods. Green, Johnson & Adams (2006) mentioned that the three types of narrative review are editorials, commentaries, and overview articles. These are comprehensive narrative syntheses of previously published information. Shah (2018) and Green, Johnson & Adams (2006) argued about several benefits of narrative reviews, including the following:

- Narrative reviews have more flexibility than quantitative reviews because quantitative reviews usually have very narrowly defined parameters and precise inclusion and exclusion rules.
- Narrative reviews provide more insight and opportunities for speculation than most quantitative review approaches. The ability to consider variation in formats and alternatives permits the generation of a wider and more inclusive picture of available research.
- Good quality narrative overviews are useful educational materials because they pull many pieces of information together into a readable format. Narrative overviews present a broad perspective on a topic or an issue.
- Narrative overviews can provoke thought and controversy when discussing theory and context. Narrative reviews may be an excellent avenue for presenting philosophical perspectives in a balanced manner.
- Critics mention that there may be a high degree of bias involved in narrative overviews than in some other research designs. However, narrative overviews constitute an important component in research.

The authors used online open-access peer-reviewed journals, books, technical reports, and newspaper articles for the study.

Discussions

Section 5 discusses the reasons for the underdevelopment of sports in developing nations, the long-term complementary strategies or cardinal pillars of sports development in developing nations, and the benefits of sports development for economic growth and development in developing nations.

Reasons for the Underdevelopment of Sports in Developing Nations

Generally, sports are underdeveloped or not promoted as expected in developing countries because of various reasons, including the following:

- (i) *Developing nations' poor economic performances*: Sports development has been affected by the level of economic development. Developing nations have low gross domestic incomes due to the small sizes of their business firms, the exports of large volumes of raw materials and semi-finished goods, economic mismanagement, corruption, etc. Developing nations suffer from high unemployment and poverty rates. The poor economic performances of developing nations have negatively affected the level and quality of their investments and their overall development plan. Chappellet (2010) wrote that the underdevelopment of sports in developing countries emanates from their economic underdevelopment. Particularly, developing nations suffer from a lack of financial capital for sports development, inadequate sports facilities and equipment, and a lack of capacity to host major sporting events. Andreff (2000) reported

that developing countries have the least sports practice, sports performance, sports facilities, and sport finance. In addition, Andreff (1988, cited in Andreff, 2000) wrote that most developing countries depend on the developed world to develop their sporting activities. The developed world gives them foreign aid, grants, imported sporting goods and equipment, multinational sponsors, and sometimes foreign direct investments by multinational corporations.

- (ii) *Inadequate sports infrastructural facilities*: Government and private sector investments in sports infrastructural facilities are inadequate because of the low returns on such investments. Sports development issues are not featured prominently on the national development plan, and as a result, sports have not received adequate budgetary supports. The importance of sports infrastructure for individuals and nations' participation in different sports had been overlooked by developing countries (Hallman, Wicker, Breuer & Schonher, 2012). Also, Sportanddev.org (n. d.) confirmed that research showed that investments in sport in developing countries are much less than in developed countries. They attributed this to the fact that sports development is usually not considered a critical issue in the national budgets of most developing countries. The low investments in sports in developing countries consequently decrease the ability of sportsmen and women to build their talents. According to Kakonge (2016), most existing sports infrastructural facilities in Africa are in awful conditions, which require heavy investments to bring them to international standards. Kakonge (2016) added that Chiweshe (2010) revealed that some African countries invested substantial sums of money into building and renovating sports stadia to host the African Cup of Nations. Unfortunately, the countries left most of the facilities to deteriorate after the tournaments.
- (iii) *Inadequate attention given to sports development in the educational curricula of most developing nations to promote grassroots sports*: Most developing nations do not give adequate attention to sports promotion and development, mostly at the grassroots level. The youth attend schools, so when sports issues are featured prominently in school curricula, more talents and skills can be identified and developed for the sports sector. According to Luiz & Fadal (2019), a country's performance in sports depends on financial resources and the level of investment in education and health. Diop (2016) wrote that in the developing world, and particularly in Africa, policy-makers tend to focus on so-called "elite" sports such as soccer, boxing, athletics, and basketball at a professional level and devote very little interest or budgetary support to the development of basic physical education.

- (iv) *Inadequate remuneration and appropriate incentive packages for sports personnel*: Due to the low incomes of developing nations, sports personnel are underpaid, and as a result, the best talents leave the shores of developing nations to seek greener pastures in developed nations. Disney (2006) disclosed that many people who engage in sport in developing nations are without remuneration because of a lack of any exceptional talent and because their activities do not generate any revenue for the organisers. Onyishi & Okou (2016) argued that in football, European countries exploited African countries through the migration of talented African footballers into Europe. This situation had contributed to European countries' dominance in the global sport. They, as a result, create inequality in football development between Europe and Africa. This development is similar to what exists in Latin America and other underdeveloped regions.
- (v) *Poor planning, bad governance, and lack of monitoring and evaluation of performances of identified talents, programmes, and investments*: Governments and sports officials fail to plan properly toward sports development and do not monitor and evaluate programmes and investments made in sports. According to the United Nations Development Programme (2009), good planning, monitoring, and evaluation of sporting activities and policies can enhance sports development by contributing to establishing clear links between past, present, and future initiatives and development results. Without effective planning, monitoring and evaluation, it would be very difficult and possibly impossible to judge if work was on track, whether progress and success could be made, and how future efforts might be improved. Kakonge (2016) wrote that most sports ministries in Africa suffer from bad governance, yet sports development hinges firmly on good governance, respect for the rules, fair play, honesty, and discipline. Kakonge (2016; cited in Mwisukha & Mabagala, 2011) argued that personnel who served in the various national sports federations and organisations in East Africa as managers were not trained professionals in sports management and administration. They lacked the scientific basis of what they were assigned to do with the obvious results of mediocre performances in sports administration and management. Andreff (2001) wrote about some observed signs of corruption, bribery, embezzlement, and money laundering through sport in developing countries.
- (vi) *Insufficient formulated and implemented active, inclusive, and interrelated sports policies*: Governments, domestic sports associations, confederations of sports associations of developing nations, and international sports federations do not have sufficient, active, and

interrelated policies for sports development in developing nations. To fully exploit the benefits of sports development in developing nations, there must be many active sports policies formulated and implemented to ensure programmes' success. Active, inclusive, and interrelated sports policies and programmes must involve all key stakeholder groups based on country-specific characteristics. These include the history of the government's involvement in sports issues, the existing political framework, and the government's public policy development process; these will help define the needs, opportunities, and priorities of the sports sector (www.un.org.sport/files). Kakonge (2016) added that some African countries have many fragmented and uncoordinated sports policies and ministries of sports that usually exist within other ministries and departments in charge of sports. The results have been inadequate funding that has made it difficult for them to finance and promote sports programmes and pursue appropriate sports policies for sports development.

- (vii) *Lack of interest in sports by most households in developing nations:* Most households in developing nations view sports as an area for those who are not academically brilliant. The inadequate exploration of the complementary role between sports and education by sports stakeholders has contributed to the underdevelopment of sports in developing countries. Education and sports are mutually inclusive or are complementary services. That is, education and sports are essential for each other. Sahni (2019) stated that when children get equal exposure to sports and academics, they become better focused and disciplined with higher punctuality values. Mandrapa (2014) added that sports teach a person many valuable lessons. When sports and education are combined, they give persons an added advantage to succeed in life.
- (viii) *Inadequate competitions organised by governments and sports associations:* Due to lack of funds, sports associations cannot organise enough competitions for sportsmen and women to unearth talents and develop their skills for the development of sports. Inadequate participation of developing nations in international competitions and poor performances of sportsmen and women from developing nations at major international sporting events has negatively affected sports development. Participation in international sports by developing countries has been very low (sportsanddev.org, n. d.). This unfortunate development has been exacerbated by a shortage of physical education and sports for all programmes. Other factors are inadequate financing for sports, inadequate sports facilities and equipment, lack of capacity to host major sporting events, and social and cultural barriers such as religion, culture, language, and the lingering influence of colonialism in

many parts of the world. Boit (2000) wrote that Africa had made little impact on soccer and athletics (track and field) while in other sports, the performance has been minimal. Many African soccer players and athletes playing and running for professional clubs in Europe have performed very well and have earned much money from their chosen fields. However, African sportsmen and women have not contributed much to the growth of sports in their indigenous economies due to the inability of African countries to stage professional championships.

- (ix) *Inadequate legal frameworks for regulating various sporting disciplines at all levels:* Developing nations lack the legal frameworks that can generally support sports development through clubs growth, contracts enforcements, discipline, teamwork, and a competitive spirit. There have been inadequate legal frameworks for regulating various sporting disciplines at all levels. In most developing countries, rules relating to sports are not adequately implemented and adhered to by stakeholders. The outcome of most sports games and events are allegedly pre-determined by officiating referees and sports officials, which in most cases result in riots, loss of games, and lives. Contracts between sportsmen and women and clubs are usually not respected with their attendant adverse effects. Club officials who take sports associations to court are either fined or expelled from sports associations. Eksteen (2012) reported that sports rules promote order and discipline among sportsmen and sportswomen. Sports rules contribute to fairness in sports to determine who the ultimate winner of a game or event will be. Sports are part of society, and for this reason, it is within the remit of the general law of the country. Sports issues that require legal interpretations and judgments by the courts include contractual, employer-employee relationships, invasion by the media of rights to privacy, defamation, and spectators' rights.
- (x) *Inadequate relevant data on sporting activities for more research work toward sports promotion and development:* Availability of relevant data help to evaluate the trends and impact of sports programmes and investments. It helps more research into activities in the sector for planning purposes. Luiz & Fadal (2019) contended that the lack of research into sports and organisational economics, especially in emerging countries, has partly explained the lack of data on sporting activities in developing countries for planning and sports development despite the bi-directional relationship between them.
- (xi) *The impact of sports development on economic growth and development is underrated:* The role of sports in solving unemployment problems among the youth and contributing to economic growth and development has been underrated compared to the industrialisation agenda of many

developing nations. Unfortunately, as a result of various reasons, developing nations still struggle to industrialise. Also, industrialisation does not sufficiently provide the magic wand for economic development in developing nations.

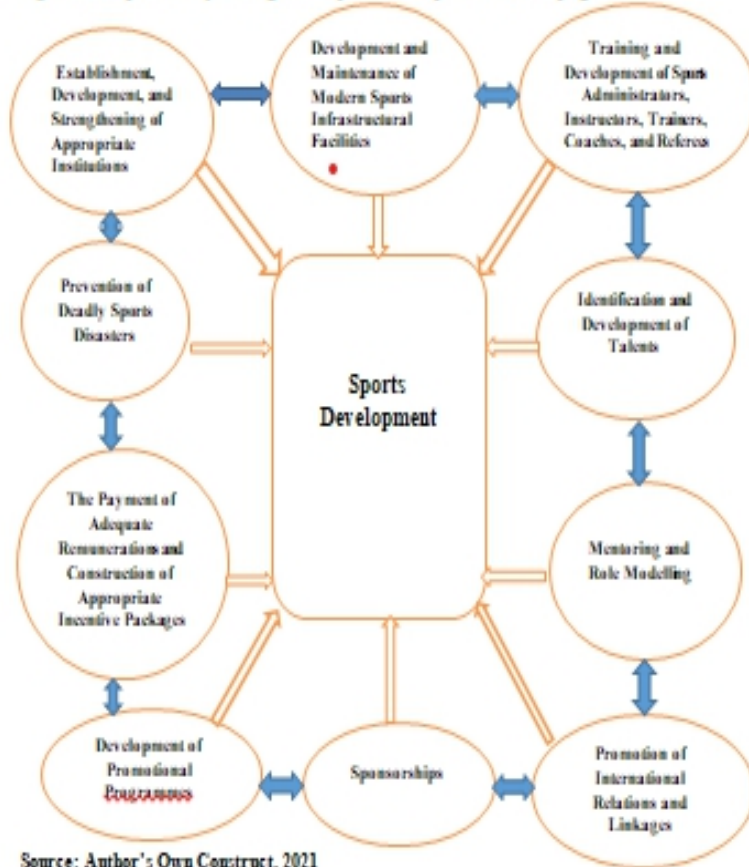
Long-Term Complementary Strategies or Cardinal Pillars of Sports Development in Developing Nations

Developing nations must implement ten (10) long-term complementary strategies or cardinal pillars necessary for promoting and developing sports in developing nations in a holistically and synchronised manner to harness the numerous benefits of sports development. Section 5.2 explains these ten long-term complementary strategies and illustrates them in Figure 3.

The ten long-term complementary strategies or cardinal pillars of sports development include the establishment, and development and strengthening of relevant institutions; the development and maintenance of modern sporting infrastructural facilities; the training and development of sports administrators, instructors, coaches, trainers, and referees; the identification and development of talents; mentoring and role modelling; the promotion of international relations and linkages; sponsorships; the development of promotional programmes; the payment of adequate remuneration and construction of appropriate incentive packages; and the prevention of deadly sports disasters.

The link between each of the ten long-term complementary strategies captured in the circles in Figure 3 and sports development, as shown by the rectangle in Figure 3, is indicated by the long brown arrows. The short brown arrows that connect the long-term strategies shown in the various circles explain that the strategies complement each other for sports development in developing countries.

Figure 3 Complementary Strategies for Sports Development in Developing Countries:



Source: Author's Own Construct, 2021

These ten long-term complementary strategies or cardinal pillars of sports development are the followings:

(a) *Establishment, development, and strengthening of appropriate institutions*: The establishment, development, and strengthening of critical institutions will promote sports policy formulation and implementation, financing, education, sanity, and publicity in the sports sector. These institutions include government institutions, international sports federations, financial institutions, and the media. Governments provide policy directions to create an enabling environment for sports development. In Ghana, the Ministry of Youth and Sports, the Ghana Football Association, the National Sports Authority, the Ghana Olympic Committee, the courts or legal system, and the security services (police, military and immigration) all help execute government policies for sports development. Without governments' policy direction, many sporting disciplines will become haphazardly managed and may become extinct. Security services enforce law and order before, during, and after sporting events to bring sanity into sports. The immigration service

works on travelling issues and issuance of residence permits to sports personnel. In Ghana, the National Democratic Congress (NDC) mentioned in its 2020 manifesto that it would develop a comprehensive national sports policy to outline the vision and strategies for sports development in Ghana. It emphasised female sports and remuneration of sportspersons if it had the opportunity to govern the nation from 2021 to 2024. According to Xiong (2007; cited in Hallmann, Wicker, Breuer, & Schönherr, 2012), the Chinese government, having identified the vital role of sports infrastructure in the nation's fitness level, implemented a nationwide policy in 1995 to improve spending on sports and the quality of life of the China people.

Sports thrive on specific pre-established rules that help fulfil the core values of sports, which provide fair play in competitions. Panagiotopoulos (2013) wrote that international law theory says that “law is a coercive order”. The law creates socially organised sanctions. The law attempts to bring about the desired social conduct of men through the threat of coercion in case of legally wrong conduct. Nanev (2013) also added that because sport is one of the leading human activities, it is the responsibility of the state and its legal system to provide special norms to govern it. The state's role is to enable and support the realisation of the social functions of sports by establishing special pre-defined rules and laws for sports and sporting activities that enjoy protection by the state. Various sports have their own technical rules and laws that govern them. International sports federations usually establish such rules and laws. There are also the ethical principles of sports that border on fairness and integrity. These ethical principles are well known as 'the spirit of the game'. They serve as an essential protection for sports and sports personnel. International sports federations manage and monitor the running of the various sports disciplines globally. These organisations include the World Anti-Doping Agency (WADA), the Federation of International Football Association (FIFA), the International Cricket Council (ICC), the International Olympic Committee (IOC), the International Netball Federation (INF), the International Federation of Sports Medicine, and the Confederation of African Football (CAF).

The media promote sports by helping sports enthusiasts access sports information and breaking the distance barriers between sports and sports enthusiasts to inform the public and all stakeholders about sporting activities. They whip up public interest in sports and reduce the costs of asymmetric information. The various types of media that impact sports development are television, radio, print (press, newspapers, and magazines), and the internet (websites, blogs, and social media). Broadcasting sporting activities on various media platforms and channels regularly enables media organisations to connect advertisers to consumers. Consumers of sports in the Middle East and Africa are among the most active social media platforms users because of

the high mobile phone penetration rate (Kavanagh, 2019). As a result, the youth participate in sports, emulate the sports stars they see on television, hear about on the radio, and read about in the print and electronic media. The increase in computers and computer programmes in sports has helped experts in sports analyse the games and performances of boxers, players, athletes, and coaches. The benefit the media derives from the commercialisation of sport is that high profile sports stories help attract audiences, listeners, and readers. For this reason, the media, in turn, makes sure that sports keep a high profile (Bitesize, 2021).

Financial institutions provide financial support to governments, business organisations, entrepreneurs, individuals, and sports personnel to finance their economic activities. They finance governments' social overhead infrastructural projects and entrepreneurs' profitable investments. They serve as channels through which the wages and salaries of sports personnel are paid and received. Banks do the transfer of incomes of foreign-based players, boxers, and athletes into their accounts and domestic economies. Insurance companies provide insurance policies to cover sporting facilities, travels, and sports personnel against the occurrence of unexpected adverse events such as thefts, accidents, and fire outbreaks. Insurance companies compensate those who suffer a loss due to accidents, burglary, vandalism, terrorism, and hooliganism. Sports personnel and spectators suffer injuries before, during, and after competitions, no matter how careful they may be. With reliable sports insurance plans and packages, sportsmen and sportswomen will be more confident to participate in games, hoping that they will be supported throughout their healing and rehabilitation processes even if they are injured. It will also help them maintain a regular flow of their incomes. The capital market also helps sports clubs and companies to cheap source capital for their activities. Investors who are into sports invest in capital market instruments to balance their portfolios and to seek good returns on their investments. According to KPMG (2016), in the late 1990s and early 2000s, many football clubs, especially in the United Kingdom (UK), saw the floating of shares on stock markets as the most preferred means to raise capital for development. The number of listed sports clubs on the stock exchange has reduced in recent years. The reason may be that clubs are generating sufficient internal funds to finance their expenditures. Governments of developing nations must review the listing requirements of their stock exchanges to enable more clubs to raise more capital to finance their expenditures. It will also ensure transparency in the management of clubs in developing countries. The establishment of the Ghana Alternative Market is an excellent example of this.

(b) *Development and maintenance of modern sports infrastructural facilities:* Both the public and private sectors must invest heavily in sports infrastructure to promote sports development in developing countries.

However, governments' contribution must be significantly more than that of the private sector because of the substantial initial capital outlays involved in infrastructural development. Sports infrastructure differs from one sport to another because of the differences in the requirements for their facilities. For example, football and hockey pitches, titan tracks, swimming pools, etc., must be provided for the various sporting disciplines. The availability of space is crucial for sport-related activities (Bu'ch, 2005; Heinemann, 1998, cited in Hallmann, Wicker, Breuer, & Schönherr, 2012). Also, the location of sports facilities has a significant influence on individuals' participation and sports development. The reason is that the probability of spending additional time and money travelling to the facility decreases if it is closer to the users and vice versa (Pawlowski et al., 2009, cited in Hallmann, Wicker, Breuer, & Schönherr, 2012). Arnott (2017) revealed that in the public sector of the United Kingdom when people were selecting a sports development initiative, they based their choices on the marketing mix variable of place. The Vice President of Ghana, Dr. Mahamudu Bawumia, on Tuesday, August 18, 2020, mentioned that the NPP government undertook sixty-eight (68) sports infrastructural projects between 2017 and 2020 in Ghana. The projects included the construction of ten 500-seater sports centres of excellence in ten regions and the construction of AstroTurf pitches in some constituencies. Also, the government would renovate the Accra, Kumasi, and Tamale sports stadia (Roberts, 2020). In the 2020 New Patriotic Party's (NPP) Manifesto, the party promised to build fully functional multi-purpose youth and sports centres of excellence in each of the six newly created regions and host and organise the 13th African Games in 2023. These projects were expected to be completed by the close of 2024. The government proposed to construct a national Olympic stadium complex to bridge the nation's sports infrastructure deficit. The ultimate purpose is to establish a university for sports development in Ghana.

(c) *Training and development of sports administrators, instructors, trainers, coaches, and referees:* Sports administrators, instructors, trainers, coaches, and referees are crucial in managing administrative issues in sports, teaching the basic tenets, skills, and rules of sports to sportsmen and sportswomen, to those who may want to keep fit, and for officiating games at both the grassroots and elite levels. The training can take place locally or in foreign countries with the help of foreign experts so that referees, coaches and trainers can acquire adequate knowledge for its onward transfer to participants. These sports instructors, trainers, coaches, and referees can work in sports clubs, schools, colleges, universities, etc. Unfortunately, many developing countries continue to rely on foreign experts to offer such services to their citizens to the detriment of the indigenous groups. In consequence, they waste huge sums of money on their salaries and accommodation. For

instance, Ghana can pride itself on four African Cup of Nations trophies, and three youth world cups and continental club cups at both the national and club levels under the tutelage of local coaches and administrators. The local coaches who have won laurels for Ghana at the international level are the late coaches like C. K. Gyamfi, Sam Arday, Osam Duodo, Cecil Jones Attuquefio, Herbert Addo, Kwesi Afranie; and alive and kicking Sellas Tetteh. In boxing, too, D. K. Poison, Azumah Nelson, Nana Yaw Konadu, Alfred Quartey, Isaac Dogboe, etc., were all once world champions and were trained by both local and foreign trainers at one point in time or another. I join many sports-loving Ghanaians to say "Ayekoo" (well done) to all those who have contributed to these achievements. Developing local coaches at any costs will have much more long term benefits and a multiplier effect on developing nations. It will help them to save money for investments in other developmental projects. In the long run, local coaches can also begin to seek foreign jobs for foreign exchange.

(d) *Identification and development of talents*: The early identification and the development of talented performers are crucial for sports development because sports are synonymous with age. Ghana must send experts around the nooks and crannies of communities to identify talented youth or children and nurture them to become successful sportsmen and sportswomen. Educational institutions such as universities, sports colleges, fitness centres, primary schools, Junior High Schools, Senior High Schools, and sports academies, and local communities' sporting clubs can become avenues for talents identification and development. It, however, requires adequate financial resource injections. Jacob (2014) investigated assets and modes of identifying and developing talented student-athletes in selected sports disciplines in Kenyan universities. He wrote that the quality and appropriateness of the sports talent identification and development environment was a significant factor that influenced all sportsmen and women in their sporting careers. The results of the study indicated, among other things, that the identification of talented student-athletes was based on the observation of the coaches during internal competitions without the application of scientific methods in the identification process. Inadequate financial support, a lack of scholarships, an absence of talent identification structures and modalities, a lack of equipment to facilitate talent identification, and a lack of knowledgeable coaches also faced Kenya's talents identification programme. However, field-based data suggest that early and higher volume of discipline-specific training and competition and institutional talent promotion programmes during adolescence do not necessarily lead to tremendous success in senior international elite sports (Vaeyens, Gullich, Warr & Philippaerts, 2009). It requires constant monitoring of higher performers throughout their entire careers.

(e) *Mentoring and role modelling*: Mentoring and role modelling involve the use of retired sports personnel and current professional sports personnel (both local and foreign) to inspire up-and-coming stars to reach greater heights. During high profile sports competitions, mentors are needed around teams to calm nerves through pep talks. Players can seek advice on transfers and contracts from senior and old players. According to McQuade, Davis & Nash (2015), the Department for Education and Skills (DfES, 2005) and Green (2002) mentioned that mentoring is a form of induction or apprenticeship that helps to develop competency, provide challenges, and support progression. Bloom, Durand-Bush, Schinke & Salmela (1998) reported that more experienced coaches mentored most coaches during their athletic and early coaching careers, which gave them valuable knowledge and insight that shaped their coaching philosophies and careers. Mentoring programmes need to be formalised and made available to many developing coaches and athletes. Also, Crisp (2018) revealed that in the field of learning theories associated with coach education, there is evidence that informal learning has a more significant impact and importance on the development of coaching practise than that of formal coach education. Given this, many national sports governing bodies and sports clubs have turned more toward mentoring as a learning and support strategy for their coaches.

(f) *Promotion of international relations and linkages*: Associating with international sports associations, sporting clubs of major sporting nations, sports companies, and non-governmental organisations (NGOs) and participating in international sporting events help tap innovations and technical assistance in the new ways of doing things in sports. Sports are dynamic. Therefore, there is the need to have access to modern skills and knowledge about sports development from nations where research and development are increasing to become an avenue for learning new things in sports (one avoids reinventing the wheel). International relations and linkages develop global and multi-disciplinary networks of organisations that promote policy formulation and projects implementations for sports development. Generally, countries with little or no international recognition struggle to compete in international sports programmes hoping to gain international recognition (Kobierecki, 2013). According to Maguire (2018), today's sports hinges on a global network of interdependency chains influenced by global flows and inequality in power relations. Developed nations and some international institutions are more endowed with talents, technologies, innovations, equipment, and infrastructural facilities, which can help developing nations' sports development. UKEssays (November 2018) published that sports had reached the international level and had social and political influences. For example, the International Olympic Committee (IOC) has 202 member states while the United Nations has 192 member states. Sports

influence international politics and diplomacy. Sports-loving fans worldwide view satellite broadcasts of European Leagues and Champions League matches, boxing and athletic competitions in which the best sportsmen and women compete for laurels. Sports personnel and associations use sports equipment produced by multinational corporations such as Adidas, Puma, Lotto, Nike, etc. We look forward to experiencing more co-operation between clubs in developing nations and their counterparts in developed nations to develop sports in developing nations. English Premier League side Southampton football Club announced their partnership deal with Kumasi Asante Kotoko SC, Ghana, in January 2021 (Ghanaweb.com, 2021). Souchaud (1996c, cited in Andreff, 2001) adds his voice to the need for bilateral international co-operations in sports development between sports stakeholders in developed and developing countries. Mention was made of Germany signing bilateral agreements with over 40 developing countries; and co-operation between France and all French-speaking developing countries and some English speaking Least Developed Countries and some Central Eastern European countries (CEECs). Denmark signed similar agreements with South Africa, Tanzania, and Zimbabwe. Finland also agreed with Tanzania. Furthermore, Sweden collaborated with South Africa, Tanzania, Uganda, and Zimbabwe. Again, Norway had a deal with South Africa, Tanzania, Zambia, and Zimbabwe. The UK with Commonwealth countries; Spain with Mozambique, for the development of grassroots football talents. These agreements involved sending football coaches and sporting goods to various developing countries involved. These agreements must be suitable for developing nations for the development of their sports.

(g) *Sponsorships*: Sponsorship is the financial and material support given to sporting disciplines, clubs, sports associations, and sports personnel for the mutual benefits of the sponsor and the entity or person sponsored. Governments' support, private sector support, and public-private partnerships are paramount in sports promotion and development in developing countries. Sports involve participation, commercialisation, management, and marketing to generate income for their development. Sponsorships increase the revenues of clubs, associations, and sports personnel. School teams may have sponsored kit, while elite sports personnel may receive a substantial amount of money for wearing specific sportswear or using branded equipment. Increased revenue from sponsorships helps increase participation in sports, enhances the performances of sports personnel and sports organisations, and helps attract large followings. Sponsors benefit from commercialising sports through high profile coverage of sports and ensuring a high profile for companies and their products (Bitesize, 2021). Nuseir (2020) indicated that sponsors give technical, expert and financial support to improve brand awareness and brand image. In return, they increase their revenues. The funding of sports should be

at all levels. Availability of sponsorship funding enables sports authorities to organise more competitions, sports personnel to focus more on their training schedules and reduce the stress they go through when finding money to train and participate in sporting competitions. Toyota signed an eight-year deal worth \$1.64 billion with the International Olympic Committee in 2015, spanning 2017 to 2024 (Sports Business, 2016, cited in Nuseir, 2020). Also, Nike signed a \$1 billion deal with the National Basketball Association (NBA) for eight years from the 2017/2018 season to the 2024/2025 season. Adidas signed a \$940 million deal with Bayern Munich for 15 years starting from 2015/2016 football season to 2029/2030 football season. Verizon, likewise, signed a \$400 million deal with the NBA for three years from 2015/2016 to 2017/2018. The sport of cricket is sponsored mainly by PepsiCo, Toyota, and Coca-Cola. Coca-Cola, Unilever, and Adidas sponsor rugby. Rolex, Anheuser-Busch, Emirates, MasterCard, and Coca Cola sponsor golf (PRO Sports, 2015, cited in Nuseir, 2020).

(h) *Development of promotional programmes*: Sports promotion helps to stimulate consumers' interest and increase participation in sports. Sports promotion helps to win over the interest or hearts of many sports-loving fans and users of sports products or services as much as possible while increasing brand awareness. The sale of a firm's product or service is driven by promoting its benefits to different potential buyers. According to Shank (2019; cited in Greenwell & Thorn, 2012), conservative organisations take a strategic approach to sports marketing. With strategic sports marketing, organisations engage in careful planning before implementing marketing activities designed to meet organisational goals. The organisation of sporting competitions like domestic clubs' leagues, schools and colleges games at the district level, regional level, and national level, and participation in international competitions are essential for sports development. Companies or business firms use promotional mixes such as advertising, public relations, sales promotion (direct marketing), and personal selling as multi-dimensional communication tools to brand their products and services. They do this to stimulate the taste, desire, preference and emotions of prospective consumers to patronise their services or products. Celebrities in the entertainment industry are also involved in sports promotional activities by sports authorities to help attract people to sporting events. Promotion develops businesses. Arnott (2017) make one understands that in terms of promotion, word of mouth communications influenced the development of the sport in the public sector in the United Kingdom. A well-chosen promotional mix increases the visibility and profitability of goods and services put on markets for sale (Attia, Chepyator-Thomson, Sonkeng & Add el Azim, n.d.). Sports marketers must invest sufficient time and resources in conducting a thorough

market and consumer behaviour analysis as a foundation for a compelling promotional mix.

(i) *Payment of adequate remunerations and construction of appropriate incentive packages*: The payments of adequate and appropriate financial and material rewards to employees in organisations boost employees' morale to work hard to increase productivity, attract new employees, and keep their best employees. These monetary and material rewards are because of differences in skills, interests, needs, and employees' preferences, making each employee unique. The development of sports in developing countries will require heavy financial and material commitments on the part of owners of sporting clubs/teams, national and local governments, and international bodies. Financial and material commitments will motivate the best talents to give off their best and make sports more attractive to prospective consumers to become profitable to entrepreneurs in sports. The active years of sports personnel are relatively short, so in the prime of their youthfulness, they need adequate remuneration to enable them to feed themselves well, take care of other personal needs, and prepare adequately for their future. Underpinning the competitive model of sports remuneration is that pay or reward is associated with preferences, abilities, and the 'personal scale of operations' of sports stars (Disney, 2006). The organisation of sports leagues and tournaments affects the remuneration of sportsmen and sportswomen. Unfortunately, many people who engage in sports are without remuneration because of a lack of exceptional talent. Also, most sporting activities do not generate any revenue for the organisers. Adequate remuneration and the payment of appropriate incentive packages to sports administrators, players, athletes, and instructors or coaches are paramount for sports development in developing countries.

(j) *Prevention of deadly sports disasters*: Stadium disasters, plane crashes, vehicular accidents, terrorism, and hooliganisms result in deaths and injuries to sportsmen and sportswomen, officialdom, and spectators. These unfortunate incidents discourage prospective sportsmen and women from participating in sports. They hinder sports fans from attending sports programmes at the various sports centres. Although it may be impossible to prevent all sports-related injuries and disasters from occurring, governments and sports officials must ensure that appropriate measures are in place to reduce their occurrences. Sports officials must educate sports personnel on wearing appropriate protective gears such as boots, goggles, helmets, gloves, etc. They are to ensure that sports equipment is in good working conditions before a sportsman or sportswoman can use it. Again, sports officials must educate spectators on the negative consequences of hooliganism. Intelligence gathering by the security agencies before and during major sporting events

will also help prevent unfortunate situations at sporting events. Everyone wants to live long and be free from troubles.

Not to be seen as a way of revisiting dark memories or days of sports, but as a reminder of the lessons to be learned, the following deadly football incidents that occurred across the globe are referred to: (1) May 24, 1964 - Lima, Peru: 318 people died and another 500 injured in riots at the National Stadium. (2) June 23, 1968 - Buenos Aires - Argentina: 74 people died, and more than 150 injured when fans tried to leave the stadium by a closed exit. (3) January 2, 1971 – Glasgow, Scotland: 66 people died, and 140 were injured when barriers in Ibrox Stadium collapsed near the end of a match. (4) October 20, 1982 - Moscow: 340 sports fans died at a European Cup match. (5) May 11, 1985 – Bradford, England: 56 people died when a cigarette stub ignited a stadium's wooden terrace section, and fire engulfed the structure. (6) May 29, 1985 - Brussels: 39 fans were killed before the European Cup final when Liverpool fans attacked their Juventus counterparts and died against a wall that eventually collapsed. (7) June 16, 1996 - Lusaka - Zambia: 9 soccer fans died and 78 others injured during a stampede. (8) April 6, 1997 – Lagos, Nigeria: 5 fans died, and more than a dozen injured when the crowd headed for exits and found most of them locked. (9) April 23, 2000 – Monrovia, Liberia: 3 people suffocated to death, and others were injured. (10) July 9, 2000 – Harare, Zimbabwe: 13 fans died after police fired tear gas into a crowd estimated at 50,000 to quell growing unruliness. (11) April 11, 2001 - Johannesburg, South Africa: 43 people died and 155 injured as fans tried to push into an overcrowded stadium. (12) April 29, 2001 – Lubumbashi, Congo: seven people were crushed to death in a stampede after police fired tear gas into an unruly crowd. (13) May 9, 2001 – Accra, Ghana: At least 123 people died in a stampede after police fired tear gas to disperse disgruntled Accra Hearts of Oaks FC and Kumasi Asante Kotoko SC fans. (14) March 29, 2009 - Abidjan, Ivory Coast: thousands of fans pushing to attend a football game between Ivory Coast and Malawi set off a stampede that killed 19 people and injured more than 100 (Global News and the Associated Press, 2012); <http://www.pr-inside.com/football-stadium-disasters-1150259.htm>, and <http://www.pr-inside.com/football-stadium-disasters-r1150259.htm>).

The violence which ensued between sports fans at England's Euro 2016 match with Russia in Marseille resulted in injuries to more than 30 people. This incident raised concerns about the need to prevent hooliganism in sports stadia (Parkinson, 2016).

Benefits of Sports Development and How They Affect Economic Growth and Development

The question many readers may want to ask is: “Considering the above incidents, what then makes the game of football and sports in general so attractive that people tend to overlook its negative effects on societies and still follow them?” Sports development impacts positively on the service sector growth and development and economic growth and development through the following benefits they offer societies: jobs creation; incomes for clubs, sports personnel, and ancillary workers; tax revenues for governments; infrastructural development; promotion of political and social cohesion; enhancement of the images of countries; healthier citizens for higher productivity; and foreign exchange.

(a) *Jobs creation*: Many projects carried out by governments in the sports sector, profitable investments of sports companies, sports clubs, sports associations, and other ancillary companies toward sports development provide job opportunities to many people. For example, sports offer jobs to sports administrators, managers, coaches, instructors, sportsmen and sportswomen, and workers of companies involved in sports-related activities. These include Nike, Puma, Adidas, Lotto, food vendors, hoteliers, cleaners, security officers, accountants, secretaries, sports reporters and analysts, retailers and wholesalers who contribute to the production and sale of sports kit and paraphernalia, as well as the promotion of sports. Sports have helped to reduce unemployment in many countries. According to the World Bank, the youth in Africa account for about 60% of Africa's unemployed population. The youth unemployment rate in North Africa is 25%. It is greater in Botswana, the Republic of the Congo, Senegal, and South Africa. Africa has 200 million people aged between 15 and 24. Africa has the largest population of young people in the world (Ighobor, 2017). The African Development Bank Group (2018) likewise projected that Africa's youth population of 1.2 billion would more than double by 2050. Africa will have one-fourth of the world's population, making Africa the world's youngest region with a median age of 25. Each year, 10 to 12 million young Africans join the job market. The increased youth population can increase productivity and strengthen inclusive, sustainable economic growth and development across the African continent. Sports are labour-intensive and can employ more people. Africa's youth unemployment challenges can be tackled in part through sports promotion and development by governments and the private sector if the youth participate in sports. In recent years, sports-related employment is increasing and is creating jobs in other related industries.

Boateng (2018) reported that the sports industry created about 4.46 million jobs in the European Union. This represented 2.12% of the total employment in the European Union. In the New Patriotic Party's (NPP's) 2020 Manifesto, the government of Nana Akufo-Addo promised to create job opportunities for Ghanaians through sports. CareerBuilder and Economic Modeling Specialists International (EMSI) looked at post-recession job growth in the six largest sports-related industries in the United States. It reported that job growth in the six largest sports-related industries in the United States increased by 12.6 per-cent between 2010 and 2014 (CareerBuilder, 2014). Moreover, sports jobs had a multiplier effect in creating more jobs in other occupations and industries. For example, 100 new jobs in sports teams and clubs in Pittsburg generated \$46.2 million new earnings across the city. About 422 additional jobs were created outside of the industry in construction, healthcare, sales, food preparation and maintenance, and hotel. Average earnings across these occupations amounted to \$78,455, above the national average, \$57,947.

- (b) *Incomes for sports clubs, sports personnel, and ancillary workers:* Sports have provided career opportunities for many people, as mentioned under point (a) above. Many talented but academically not brilliant have found solace in sports and have become more prosperous than their more educated (academic) counterparts. Workers in the sports sector and other ancillary sectors are paid wages and salaries, which are spent on goods and services. Savings of these categories of workers are also borrowed and invested by deficit spending units to produce more goods and services. These incomes have multiplier effects with a significant positive impact on economic growth and development in developing countries. Wages and salaries in football are paid to players, technical and administrative employees. Also, signing-on fees, bonuses, termination payments, social security contributions, and other employee benefit expenses are paid to deserving employees. Western (2020) published a list of the twenty (20) wealthiest athletes in 2020, as compiled by Forbes and Celebrity Net Worth. The list included Vince McMahon, an American former professional wrestler, who had a net worth to the tune of \$2.2 billion. The net worth of Ion Tiriac, a Romanian former professional tennis and ice hockey player, was \$2 billion. He is now the owner of the Mutua Madrid Open Tennis Tournament. Michael Jordan, an American retired professional basketball player, had a net worth estimated at \$1.9 billion. Also, Tiger Woods, an American professional golfer, had a net worth estimated at \$740 million. Furthermore, Floyd Mayweather, a former professional boxer and the founder of Mayweather Promotions, was worth \$565 million. LeBron James, an American professional basketball player in the NBA for the Cleveland Cavaliers, had a net worth of \$480 million.

Cristiano Ronaldo, a Portuguese footballer, was reported to have had a net worth of \$460 million. According to Wilson (2018), the big five European leagues generated a record 14.7 billion euros (an equivalent of 12.6 billion pounds) in revenue in the 2016/2017 season, a 9 per-cent annual increase. Again, Deloitte's Annual Review of Football Finance revealed that the European football market generated €28.4 billion in revenues in the 2017/18 season. The 'big five' European leagues generated a record €15.6 billion in revenue in 2017/18, a 6 per-cent increase from the previous year. On May 30, 2019, Deloitte & Touche (2019) reported that the European football market's revenues grew by 11 per-cent to €28 billion. The increase in revenue resulted from the increased revenue of the 'big five' European leagues, which increased their combined revenues by 6 per-cent in 2017/18 and the revenue from the FIFA World Cup in Russia. Chappelet (2010) adds that sports contribute about two per cent to the gross domestic product in industrial countries.

- (c) *Tax revenues for governments:* Governments contribute to economic activities by providing social overhead infrastructural facilities, addressing market failures, etc. (Acquah-Sam, 2020). Governments' finance their expenditures through tax revenues collected from the citizenry and companies. These companies include those in the sports sector. In November 2020, New Jersey collected a total of US\$6.23 million in tax from sports betting, lower than the previous month's total of US\$7.44 million (Lock, 2021). These government-financed activities contribute to the growth of economies of the world. Sports personnel and sports companies pay road tolls, income taxes, and corporate taxes on their wages and salaries, and corporate profits. Again, sports clubs pay taxes on entrance fees (proceeds) earned from sporting activities. Sports clubs pay taxes on incomes from other revenue-generating activities of sports clubs. It means that when sports are well-developed in developing countries, the major players of sports may receive higher wages and salaries. These sports personnel can pay higher taxes to develop their nations. In many developing nations like Ghana, sports contribution to tax revenue generation is inadequate because of the low incomes of sports personnel and sports clubs. There is an adage in the Akan language in Ghana that "kitiwa biara nsoa". It means that "there is nothing too small". Ghana should start collecting income taxes from the incomes of footballers and sports officials, no matter how small they may be, and develop it from there. Many workers working in other sectors earn "peanuts", yet they pay taxes to the states for economic growth and development.
- (d) *Infrastructural development:* Sports thrives on adequate sports infrastructures such as sports stadia, tennis courts, hotels, roads, telecommunication networks, and market centres. Lange (2020) reported

that a survey on a two-year projected non-player capital expenditure of English Premier League clubs revealed that 7% of club directors stated that they intended to allocate 50 million pounds. Governments use sports events to develop cities by combining economic, social, environmental, and other concerns. In the 2020 New Patriotic Party's (NPP's) Manifesto, the party promised to build a fully-functional multi-purpose youth and sports centre of excellence in each of the six newly-created regions in Ghana. These were to augment the Ten (10) which were already under construction and near completion. Also, to host and organise the 13th All African Games in 2023, the party planned to construct a national Olympic stadium complex to bridge the nation's sports infrastructure deficit which would ultimately serve as a university for sports development in Ghana. Sports infrastructure leads to economic growth and development since they provide the tools for the efficient running of sports and their related economic enterprises. During the construction of sporting infrastructural facilities, roads, bridges, rail networks, airports, water, electricity, etc., are also provided. International sports governing bodies also give monies to member countries to help them develop sports infrastructure. The FIFA Goal Project, aimed at helping developing countries mainly in Africa and Asia to establish infrastructure and facilities to boost the game's growth, has assisted in the infrastructural development of Member Associations on the continent of Africa. In 2015, FIFA embarked on funding a four-star hotel in Rwanda through its Goal projects. The hotel, when built, would reduce the expenses that the Ministry of Sports and Culture (MINISPOC) used to incur on national teams during residential training and accommodation for visiting national teams (Africa for Africa, 2015).

- (e) *Promotion of political and social cohesion:* The victories chalked by local and national sports teams and individual sportspersons help promote unity among the citizens of countries. One hardly hears citizens talk about partisan politics when national teams or football clubs win matches at major international tournaments. In the same vein, boxers and athletes winning boxing fights and races or events at major competitions bring national unity. Opposing parties in parliaments, organisations, and on the street, all celebrate victories in sports. National and private television and radio stations become occupied with sports-related issues. In times of civil conflicts, sports have played a significant role in reconciling opposing parties. The government of Ghana resorted to football matches to reconcile the Kokombas and Nanombas in 1993 and 1994. The building of sports facilities also boosts the chances of a sitting government winning an election. Peace brings development as people go about their regular duties in peace and security. Countries such as Germany capitalised on football to improve the process of social integration of descendants of immigrants.

According to Diop (2016), in September 2015, Jim Yong Kim, President of the World Bank Group, was reported to have signed a US\$50 million agreement with Novak Djokovic's foundation to support social inclusion and early childhood development programmes in Serbia. This agreement was to more effectively combat the inequality affecting young children from poor and disadvantaged backgrounds. Sugden (2010) referred to sports as a social good because of their fraternal and character-building qualities and their capacity to bring together different kinds of people, communities, and nations through regional sports festivals, club football matches, athletic competitions, and international sports competitions.

- (f) *Enhancement of the images of countries:* Sports serve as a critical strategy for cities and countries to promote their images and global positions. These benefits make nations compete to host major international sporting events, despite the enormous costs involved. Sport Management Association of Australia and New Zealand (1998) wrote that major sporting events usually do not generate enough tax revenue to justify the taxpayers' funds used to organise them. Gripsrud, Nes & Olsson (2014) argued that when countries host major sports events, they earn opportunities and likewise face challenges. Whenever sports teams and players are involved in major international competitions, the countries whose nationals are involved in the competitions become household names to the rest of the world. For example, Ghana is a household name in world football circles through the following achievements in football: The four-time African Cup of nations gold medals won by the Black Stars of Ghana. The 1991 and 1995 Under 17 FIFA World Cup gold medals won by the Black Starlets of Ghana. The bronze medal feat of the Black Meteors of Ghana at the Olympic Games in Atlanta in 1996. The country's participation in 2006, 2010, and 2014 FIFA World Cup tournaments. The Gold medal won in 2009 in Egypt, and the Silver Medals won in Australia in 1993 and Argentina in 2005 by the Black Satellites of Ghana. Ghana's image enhancement and other countries have the positive effects of boosting aid, grants, international trade, and attracting substantial foreign direct investments into various sectors of the Ghanaian economy.
- (g) *Healthier citizens for higher productivity:* Sports and recreations improve people's physical fitness and health, which in the long run reduce the medical bills of people and nations, which would have negatively affected individuals' living standards and economic growth and development. Sports help reduce heart problems, high cholesterol, mental stress, and high blood pressure. Sports make it possible for people to develop their brains and to think better and faster. During a game, individuals must make quick decisions within split seconds to outperform their opponents.

Physical activities contribute to forming a healthier society. Skills and abilities developed through sports promote people's well-being and directly improve their physical, mental, and psychological performance and produce a better quality of life. The state of health of the workforce is critical. Those who are more active physically, other things being equal, are more efficient in their jobs hence increasing the productivity of workers and the growth of GDP. Sick leave benefits and health insurance costs are lower in organisations that have a healthy workforce. Promoting good health among the workforce can be an investment in the future (Nagy & Tobak, 2018). According to Diop (2016), in November 2014, the World Bank, in partnership with the World Health Organisation (WHO) and the Federation of International Football Association (FIFA), organised an awareness-building campaign in the fight against Ebola in West Africa. The campaign brought together the world's top football players, including Didier Drogba and Cristiano Ronaldo. Football was also used as an effective vehicle for raising awareness of the ravages of AIDS, with FIFA establishing HIV/AIDS prevention and control programmes as part of its "football for hope" initiative.

- (h) *Foreign exchange generation:* Remittances from sportsmen, sportswomen, and sports officials who ply their trades in foreign countries generate foreign exchange for local economies. Likewise, the sale of sports kits overseas by kit-producing companies, the transfer fees of footballers, and the organisation of international sporting events generate foreign exchange for countries. The monies foreign sporting personalities and sports fans spend on hotels and other forms of accommodation, meals, water, and other goods and services during sporting events help generate foreign exchange for the host countries. Foreign nationals who attend and participate in international sporting events buy goods and services in countries that host the sporting events. They do so by changing their foreign currencies into domestic currencies. These sources of revenue help reduce the exchange rate problems of domestic economies and reduce the costs of importation of goods and services. It also helps to improve the balance of trade position of countries. The increase in demand for goods and services during sporting events and the foreign exchange earned when invested in productive sectors of economies will increase the production of goods and services to increase economic growth and development. Hatzigeorgiou (2016) wrote that sports could help to increase foreign trade and promote global economic integration. Sports can provide visibility opportunities for countries and spur the interest of firms and consumers in respective foreign markets. In this regard, countries which engage in sporting activities with each other improve their bilateral trade.

Conclusions and Recommendations

Section 6 concludes the paper and recommends the ways forward for developing sports in developing nations for them to impact positively on economic growth and development in developing countries.

Conclusions

This paper explored some of the existing theories and empirical literature on sports development, service sector development, and economic growth and development. Specifically, it synchronises the underdevelopment of sports in developing countries, the long-term complementary strategies or cardinal pillars of sports development in developing countries, and the benefits of developing sports in developing countries. The paper employed a narrative overview research approach with the following findings:

- (a) There are eleven general reasons for the underdevelopment of sports in developing countries that need critical attention from various stakeholders of sports development.
- (b) Sports development hinges on the holistic development of ten long-run complementary strategies or cardinal pillars. These strategies are the establishment, development, and strengthening of relevant institutions; the development and maintenance of modern sporting infrastructural facilities; the training and development of sports administrators, instructors, coaches, trainers, and referees; the identification and development of talents; mentoring and role modelling; the promotion of international relations and linkages; sponsorships; the development of promotional programmes; the payment of adequate remuneration and construction of appropriate incentive packages; and the prevention of deadly sports disasters.
- (c) Sports development can help developing nations as follows: Jobs creation; incomes for clubs, sports personnel, and ancillary workers; tax revenues for governments; infrastructural development; promotion of political and social cohesion; enhancement of the images of countries; healthier citizens for higher productivity; and foreign exchange.
- (d) Interrelationships exist among sports development, service sector growth and development, and economic growth and development of developing countries.

Recommendations

Developing nations must develop sports based on the appropriate sports infrastructural facilities, natural talents of the citizenry (children and youth), and climatic conditions. They must also consider the availability of financial, material, and human resources and the adaptation and adaptability of the citizenry to foreign sports and sports technologies. For example, in

athletics, athletes from Kenya, Ethiopia, and most East African countries excel more in long-distance running mainly due to the natural talents of their citizens, the climatic conditions of the countries, and the availability of human resources.

Developing nations must implement more and active national sports policies that seek to tackle the development of the channels of sports development holistically and devoid of partisan politics. Governments must give tax incentive packages to sponsors of sports programmes and clubs to attract more sponsors into the sector. There must be more public-private partnerships and investments in sports.

The statistical service and its equivalent institutions in developing nations must compile appropriate and accurate sports data to promote research into the sector for national planning.

Developing nations must ban the sale of alcoholic drinks in and outside sports stadia to reduce sports hooliganism. Clubs must play matches during the day. They must also play games that have the potential of igniting violence between rival supporters behind closed doors. Sports authorities must educate supporters on putting up appropriate behaviour during and after sporting events and fine those who go contrary to sports protocols. Sportsmen and sportswomen must desist from making gestures of contempt during and after sporting events.

Governments of developing nations must maximise the returns on their investments in sports. They must ensure that all government agencies mandated to promote the sector's development effectively monitor, evaluate, and account for governments' investments or resources committed to sports promotion and development.

Governments' interest in sports must not be limited to national teams only. Governments must scrutinise progress at grassroots sports and club level management to ensure sports personnel are adequately remunerated and are well treated. The national teams must not be allowed to be used by a few sports and government officials to amass wealth at the state's expense. Allah (2018) referred to a report of the World Economic Forum that generally, grassroots sports where innovative public-private partnerships and investments could benefit society most were not receiving the appropriate levels of support from various stakeholders.

Sportsmen and sportswomen must be educated and advised on the efficient use of their wealth or incomes to impact economic growth and development positively. They must not engage in wasteful spending to help grow their economies and live decent lives after retirement. Sportsmen and women have a limited number of active years of service of at most 35 years, so they need to maximise the gains of their active years in sports.

Sufficient and sustained levels of all kinds of investment in sports coupled with strong institutions, good governance, and effective policies are critical for sports development and economic growth and development to improve the quality of life of the people in developing countries.

Future research works must look at the quantitative approach to measuring the effects of sports development on the service sector growth and development and economic growth and development in developing nations. Other improved methodological designs such as systematic reviews and meta-analysis are also recommended for future researchers in the area to exploit.

References:

1. Acquah-Sam, E. (2020, July 8). The engine of inclusive sustainable economic growth and development: How seen? *Business and Financial Times*, Ghana, pp. 11 & 18
2. Africa for Africa (2015). FIFA Goal project to fund Four-star hotel in Rwanda. *Construction Review Online*. Retrieved on 26th January 2021 from. <https://constructionreviewonline.com/2015/06/four-star-hotel-constructed-rwanda-football-federation/>
3. Allah, N. S. (2018). Exploring the link between sports and economics. *sportanddev.org*. Retrieved on 22nd January 2021 from <https://www.sportanddev.org/en/article/news/exploring-link-between-sport-and-economics>
4. African Development Bank Group (2018). Jobs for youth in Africa: improve the quality of life for the people of Africa. Communication and External Relations Department. Retrieved on 16th January 2021 from https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Brochure_Job_Africa-En.pdf
5. Andreff, W. (2001). The correlation between economic underdevelopment and sport, *European Sport Management Quarterly*, 1:4, 251-279, DOI: 10.1080/16184740108721902
6. Andreff, W. (2000). Sport and economic development. *Play the Game*. Retrieved on 4th February 2021 from <https://www.playthegame.org/news/news-articles/2000/sport-and-economic-development/>
7. Arnott, I. (2017) Effective marketing communication efforts of sports development initiatives: A case study of the public sector in the United Kingdom. In: Campbell C.L. (eds) *The Customer is NOT Always Right? Marketing Orientations in a Dynamic Business World. Developments in Marketing Science: Proceedings of the Academy of Marketing Science*. Springer Cham. https://doi.org/10.1007/978-3-319-50008-9_15

8. Attia, A. S. M., Chepyator-Thomson, R. J., Sonkeng, K. & Abd el Azim, K. E. H. (n. d). Use of sport promotion mix to increase consumption of services: A case study of El-Hawwar Sport Club in Egypt. *Journal of Research*, volume 10, issue 1. Retrieved On 14th January 2021 from <https://files.eric.ed.gov/fulltext/EJ1202463.pdf>
9. Baumol, W. J. (2004). The cost disease of the personal services. In: Rowley C.K., Schneider F. (eds) *The Encyclopedia of Public Choice*. Springer, Boston, MA. https://doi.org/10.1007/978-0-306-47828-4_70
10. Bitesize, (2021). Commercialisation in sport. BBC.Com. Retrieved on 25th January, 2021 from <https://www.bbc.co.uk/bitesize/guides/zp2jxsg/revision/1>
11. Bloom, A. G., Durand-Bush, N., Schinke, J. R. & Salmela, H. J. (1998). The importance of mentoring in the development of coaches and athletes. *International Journal of Sports Psychology*, 29: 267-281
12. Boateng, K. D. (2018). Sports can support employment in Africa. *Sports for development and Peace*.
13. Boit, M. (2000). Using sports in national development. *Play the Game*. Retrieved on 12th January, 2021 from <https://www.playthegame.org/news/news-articles/2000/using-sports-in-national-development/>
14. Bourhis, J. (2018). Narrative Literature Review In: *The SAGE Encyclopedia of Communication Research Methods*. Thousand Oaks: SAGE Publications, Inc. Retrieved on 5th April 2021 from <https://methods.sagepub.com/base/download/ReferenceEntry/the-sage-encyclopedia-of-communication-research-methods/i9413.xml>
15. CareerBuilder (2014). 22 of the fastest growing sports jobs. Retrieved on 12th January 2021 from <https://www.careerbuilder.com/advice/twenty-two-of-the-fastest-growing-sports-jobs>
16. CareerBuilder (2014). Sports-related employment is on the rise and creating jobs in other industries, according to new research from CareerBuilder and economic modeling specialists. *CISION PR Newswire*
17. Chappelet, Jean-Loup (2010). Sport and economic development. IDHEAP Swiss Graduate School of Public Administration. Retrieved on 21st January 2021 from https://www.sportanddev.org/sites/default/files/downloads/sport_economic_development_in_english.pdf
18. Crisp, P. (2018). Sports coach mentoring - Impacts on the mentors, not the 'mentees'. A case study of the active Sussex coach support officers scheme. *The Sports Journal*. Retrieved on 14th January, 2021 from <https://thesportjournal.org/article/sports-coach-mentoring/>

19. Debasish (n.d). Rostow's drive to maturity stage of economic growth (14 features). Retrieved on 22nd January, 2021 from <https://www.economicdiscussion.net/economic-growth/rostows-drive-to-maturity-stage-of-economic-growth-14-features/4578>
20. Debasish (n.d). Features of the pre-conditions for take-off stages of economic growth. Retrieved on 22nd January 2021 from <https://www.economicdiscussion.net/economic-growth/rostows-take-off-stage-of-economic-growth/4572>
21. Developing effective policies and programs: Focus on sports and peace. Retrieved on 22nd February 2021 from https://www.un.org/sport/sites/www.un.org.sport/files/ckfiles/files/Chapter7_DevelopingEffectivePoliciesandPrograms.pdf
22. Deloitte and Touche (2019). European football market revenues grow to record €28 billion as the 'big five' leagues drive growth. Retrieved on 1st February 2021 from <https://www2.deloitte.com/xs/en/pages/about-deloitte/articles/european-football-market-revenues-grow-record-28b-big-five-leagues-drive-growth.html>
23. Diop, M. (2016). Why sports and development go hand in hand. Education for Global Development. Retrieved on 11th January 2021 from <https://blogs.worldbank.org/education/why-sports-and-development-go-hand-hand>
24. Disney, R. (2006, May 11). Remuneration of sports stars: Implications for regulation. Modern Law Review Seminar, the Regulation of Sport, CELI, Faculty of Law, University of Leicester
25. Eksteen, E. (2012). Sports development, law and commercialisation. Bookboom.com
26. Ghanaweb.com (2021). Southampton confirms partnership deal with Asante Kotoko. Retrieved on 19th January 2021 from <https://www.ghanaweb.com/GhanaHomePage/SportsArchive/Southampton-confirms-partnership-deal-with-Asante-Kotoko-1158236>
27. Ghavidel, S. & Sheshkalany, N. A. (2017). Cost disease in service sector. The Service Industries Journal, vol. 37, issue 3-4
28. Global News and the Associated Press (2012). Soccer's history of deadly riots. Global News
29. Green, B. N., Johnson, C. D, & Adams, A. (2006). Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. J Sports Chiropr Rehabil 2001; 15:5–19.
30. Greenwell, C. & Thorn, D. (2012). Chapter 2: Developing a strategic sport marketing plan from marketing for sport business success. 1st ed., Bonnie Parkhouse, Brian Turner, & Kimberly Milo. Property of Kendall Hunt Publishing Retrieved on 26th January 2021 from

- https://he.kendallhunt.com/sites/default/files/uploadedFiles/Kendall_Hunt/Content/Higher_Education/Uploads/Parkhouse_1e_Ch2.pdf
31. Gripsrud, G., Nes, B. E., & Olsson, H. U. (2014). Effects of hosting a mega-sport event on country image. *Event Management*, Vol. 14, pp. 193–204
 32. Hallmann, K., Wicker, P., Breuer, C. & Schonherr, L. (2012). Understanding the importance of sport infrastructure for participation in different sports-findings from multi-level modelling. *European Sport Management Quarterly* 12(5):525-544. DOI: 10.1080/16184742.2012.687756
 33. Haksever, C. & Render, B. (2013). The important role services play in an economy. In: *Service Management: An Integrated Approach to Supply Chain Management and Operations*. InformIT. <https://www.informit.com/articles/article.aspx?p=2095734&seqNum=4>
 34. Hatzigeorgiou, A. (2016). Can sports promote exports? The role of soccer matches in international trade. *Global Economy Journal* 16(1): 1-32
 35. Ighobor, K. (2017). Youth and unemployment: Africa's jobless youth cast a shadow over economic growth. *Africa Renewal*, Special Edition on Youth. Retrieved on 16th January 2021 from www.un.org
 36. International Labour Organisation (ILO, 2020). Unemployment, informality and inactivity plague youth in Latin America and the Caribbean. *Global Employment Trends for Youth 2020*. www.ilo.org
 37. International Labour Organisation (ILO, 2020). Youth employment in Asia-Pacific. *Asia-Pacific Youth Employment Network*. www.ilo.org
 38. Jaco, A. (2014). Assets and modes of identification and development of talented student-athletes in selected sport disciplines in Kenyan universities. A research thesis submitted in partial fulfilment of the requirements for the award of the degree of Master of Science (Leisure and Recreation Management) of Kenyatta University School of Applied Human Sciences
 39. Jacobs, J. (2020). Rostow's stages of growth development model. ThoughtCo. Retrieved on 20th January 2021 from <https://www.thoughtco.com/rostows-stages-of-growth-development-model-1434564>
 40. Kakonge, O. J. (2016). Sports in Africa: An untapped resource for development. *Pambazuka News*
 41. Kavanagh, D. (2019). 5 things to know about sports on social media. GWI. Retrieved on 25th January 2021 from <https://blog.globalwebindex.com/chart-of-the-week/sport-social-media/>

42. Kim, Hyun-Jeong (2006). "The shift to the service economy: causes and effects (in Korean)," *Economic Analysis (Quarterly)*, Economic Research Institute, Bank of Korea, Vol. 12(4), pages 35-76.
43. KPMG (2016). *KPMG Analysis of football clubs and the stock exchange in 2016*. LawInSport. Retrieved on 12th January 2021 from <https://www.lawinsport.com/topics/features/item/football-clubs-and-the-stock-exchange-in-2016>
44. Kobierecki, M. M. (2013, p.71). Sport in international relations expectations, possibilities and effects. *International Studies Interdisciplinary Political and Cultural Journal*, Vol. 15, No. 1/2013
45. Krueger, A. O. & Myint, H. (2016, September). Economic development. *Encyclopedia Britannica*. Retrieved on 22nd February 2021 from <https://www.britannica.com/topic/economic-development>.
46. Lange, D. (2020). UK projected spending on infrastructure by professional football clubs in 2017. Statista. Retrieved on 25th January 2021 from <https://www.statista.com/statistics/546201/projected-level-capital-spend-by-football-clubs-stadium-infrastructure-next-two-years-uk/>
47. Lock, S. (2021). New Jersey: Monthly sports betting tax revenue 2018 – 2020. Statista. Retrieved on 25th January 2021 from <https://www.statista.com/statistics/1126111/monthly-sports-betting-tax-revenue-new-jersey/>
48. Luiz, J. & Fadal, R. (2019). An economic analysis of sports performance in Africa. *International Journal of Social Economics*, 38 (10) 2011 pp. 869-883, Emerald Group Publishing Limited
49. Mandrapa, N. (2014). Sports and education. Novak Djokovic Foundation. Retrieved on 5th February 2021 from <https://novakdjokovicfoundation.org/sports-and-education-can-go-hand-in-hand-right/>
50. Maguire, J. (2018). Sport and globalisation entry for: Sport and development web-based platform, DOCPLAYER. Retrieved on 25th January 2021 from <https://docplayer.net/21027573-Sport-and-globalisation-entry-for-sport-and-development-web-based-platform-swiss-academy-for-development-switzerland.html>
51. Maiello, M. (2017). Diagnosing William Baumol's cost disease. *Chicago Booth Review*. Retrieved On 22nd January 2021 from <https://review.chicagobooth.edu/economics/2017/article/diagnosing-william-baumol-s-cost-disease>
52. Martorano, B., Sanfilippo, M. & Haraguchi, N. (2017). What factors drive successful industrialisation? Evidence and implications for developing countries. United Nations Industrial Development Organisations. *Inclusive and Sustainable Industrial Development*

- Working Paper Series WP 7| 2017. Retrieved on 3rd February 2021 from <https://www.unido.org/api/opentext/documents/download/9920891/unido-file-9920891>
53. McQuade, S., Davis, L. & Nash, C. (2015). Positioning mentoring as a coach development tool: Recommendations for future practice and research. *Quest*, 67:3, 317-329, DOI: 10.1080/00336297.2015.1048810 Retrieved on 14th January 2021 from <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1080%2F00336297.2015.1048810>
54. Nagy, A. & Tobak, J. (2018). The role of sport infrastructure: Use, preferences and needs. *APSTRACT* Vol. 9. Number 1-2. 2015. Pages 47-52
55. Nanev, L. (2013). Sports law as an independent branch of law. *Balkan Social Science Review*, Vol. 2, December, 2013, 167-187
56. Norbrook, N. (2021). Is manufacturing dead across Africa? Dangote and Ford didn't get the memo... *The Africa Report*. Retrieved on 20th April 2021 from https://www.theafricareport.com/81052/is-manufacturing-dead-across-africa-we-didnt-get-the-memo/?utm_source=newsletter_tar_daily&utm_campaign=newsletter_tar_daily_20_04_2021&utm_medium=email&utm_content=edito_full_story
57. Nuseir, T. M. (2020). The effects of sponsorship on the promotion of sports events. *International Journal of Business Innovation and Research*, Vol. 22, No. 2.
58. Nzau, M. (2010). Africa's industrialization debate: A critical analysis. *The Journal of Language, Technology & Entrepreneurship in Africa*, Vol. 2. No.1. 2010, ISSN 1998-127
59. Onyishi, E. A. & Okou, T. F. (2016). Underdevelopment of Sports in Africa, Or Africa in the Era of Underdevelopment: A View from the Global South. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, Volume 3 Issue 12, November.
60. Panagiotopoulos, P. D. (2013). Sports law, structures, practice, justice, sports science and studies. 18th IASL Congress Proceedings Beijing 2012, Organised by International association of Sports Law. Hellenic Center of Research on Sports Law
61. Parkinson, J. (2016). Five ways to stop football hooliganism. *BBC News Magazine*. Retrieved on 15th January 2021 from <https://www.bbc.com/news/magazine-36516017>
62. Roberts, P. (2020). 12 done, 58 under construction, NPP's sports infrastructure record. *The independent*, www.ghanaweb.com. Retrieved on 24th January 2021 from theindependentghana.com

63. Rostow, W. W. (2012). *The age of high mass-consumption*. Cambridge: Cambridge University Press. Retrieved on 22nd January 2021 from <https://www.cambridge.org/core/books/stages-of-economic-growth/age-of-high-mass-consumption/BD6E4422DBA20981243A0DC345B3D5DD>
64. Sagasti, F., Bezanson, K., Prada, F., Blockus, K., Casabonne, U., Teresa, L. A., & Salop, J. (2005). *The Future of Development Financing: Challenges, Scenarios and Strategic Choices*. The Institute of Development Studies (IDS), the University of Sussex for the Global Development Studies series, Expert Group on Development Issues (EGDI) of the Ministry for Foreign Affairs, Government of Sweden
65. Sahni, V. (2019). Imperative to make academics and sports go hand in hand. *BW Education*. <http://bweducation.businessworld.in/article/Imperative-To-Make-Academics-And-Sports-Go-Hand-In-Hand/02-09-2019-175566/>
66. Shah, S. (2018). Secondary research - the basics of narrative reviews, systematic reviews, and meta-analysis. *editage Insights*. Retrieved on 4th April 2021 from <https://www.editage.com/insights/secondary-research-the-basics-of-narrative-reviews-systematic-reviews-and-meta-analysis>
67. Sportanddev.org (n. d.). Barriers to participation. Retrieved on 25th January 2021 from <https://www.sportanddev.org/en/learn-more/disability/sport-and-adapted-physical-activity-apa/barriers-participation>
68. Sportanddev.org (n.d.). Underdevelopment of sport in developing countries. Retrieved on 8th February 2021 from <https://www.sportanddev.org/en/learn-more/economic-development/underdevelopment-sport-developing-countries-0>
69. Sport Management Association of Australia and New Zealand (1998). Taxpayer subsidies for major sporting events. *Sport Management Review*, Volume 1, Issue 1, November 1998, Pages 25-43
70. Sugden, J. (2010). Critical left-realism and sport interventions in divided societies. *International review for the sociology of sport*, 45, 258-272. Retrieved on 17th February 2021 from <http://users.polisci.wisc.edu/schatzberg/ps616/Sugden2010.pdf> 22nd June 2011.
71. Tafirenyika, M. (2016). Why has Africa failed to industrialize? Experts call for bold and creative policies. *Africa Renewal*. Retrieved on 3rd February 2021 from <https://www.un.org/africarenewal/magazine/august-2016/why-has-africa-failed-industrialize>

72. Torado, P. M. & Smith, C. S. (2006). *Economic development*. 9th ed., Essex: Pearson
73. UKEssays. (November, 2018). Sports and international relations. *International Relations*. Retrieved on 25th January 2021 from <https://www.ukessays.com/essays/international-relations/sports-plays-a-significant-role-in-international-relations.php?vref=1>
74. Western, D. (2020). The 20 richest athletes in the world 2020. *Wealthy Gorilla*. Retrieved on 6th January 2021 from <https://wealthygorilla.com/top-20-richest-athletes-world/>
75. Wilson, B. (2018). European football is worth a record 22 billion pound, says Deloitte. *BBC News*. Retrieved on 6th January 2021 from <https://www.bbc.com/news/business-44346990>
76. Witt, U. & Gross, C. (2019). The rise of the “service economy” in the second half of the twentieth century and its energetic contingencies. *J Evol Econ* 30, 231–246 (2020). <https://doi.org/10.1007/s00191-019-00649-4>
77. Hallmann, K., Wicker, P., Breuer, C. & Schönherr, L. (2012). *Understanding the importance of sport infrastructure for participation in different sports – findings from multilevel modeling*. London: Routledge. Retrieved on 6th January 2021 from <http://www.tandfonline.com/loi/resm20>
78. Vaeyens1, R., Gullich, A., Warr, R. C. & Philippaerts, R. (2009). Talent identification and promotion programmes of Olympic athletes. *Journal of Sports Sciences*, 1–14, London: Routledge
79. <https://www.sportanddev.org/en/learn-more/disability/sport-and-adapted-physical-activity-apa/barriers-participation>
80. www.statista.com



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Construction Et Première Validation D'un Mini-Questionnaire d'Inventaire Des Stratégies Identitaires Chez Des Adolescents Migrants Scolarisés En Situation Transculturelle

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Résumé

En contexte africain, le développement de la personnalité est tributaire des niches socioculturels régissant la construction de l'identité individuelle, sociale et du concept de soi du sujet. Cependant, le changement socioculturel entraîne une rupture entre l'identité de base engagée dans son milieu anthropomorphiste d'origine et celle assignée en milieu d'accueil. Pour résoudre ce conflit identitaire, l'on construit des mécanismes que la littérature

range dans le concept de ‘‘stratégies identitaires’’. Mais jusqu’ici, elle ne propose pas d’outils permettant de mesurer clairement ce construit. C’est pourquoi dans cette recherche, l’on se propose de développer un instrument psychométrique standardisé, permettant d’évaluer quantitativement la construction des stratégies identitaires chez les adolescents migrants scolarisés en situation transculturelle. Il est organisé autour de quatre facettes/dimensions/sous-échelles relatives au Camouflage/Clandestinité/Redéfinition de soi, l’Arrangement/Affichage de soi, l’Évitement/Réparation de soi, et le Dénier/Annulation de soi ou d’autrui. Après étalonnage/validation auprès de 368 adolescents migrants dont 184 réfugiés centrafricains et 184 déplacés internes Extrême-Nord/Nord camerounais, des deux sexes, âgés de 12 à 18 ans et scolarisés à l’Est-Cameroun, les analyses factorielles exploratoires et en composantes principales lui confèrent des qualités métrologiques fiables (α_{items} [.68, .93] ; $\alpha_{\text{QISIST}_{\text{global}}} = .78$). Ainsi, la validité/fidélité et la cohérence interne du questionnaire sont satisfaisantes.

Mots clés: Stratégie Identitaire, Adolescents Migrants, Situation Transculturelle, Réfugié, Déplacé Interne

Construction And First Validation Of An Inventory Mini-Questionnaire Of Identity Strategies For Migrant Adolescents Schooled In A Trans/Cross-Cultural Situation

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Abstract

In the African context, the development of the personality depends on the socio-cultural niches that construct the individual/social identity and the self-concept of the subject. However, socio-cultural change is causing a gap between the basic identity engaged in its original anthropomorphic environment and that assigned in the host environment. To resolve this identity conflict, they construct mechanisms that the literature classifies under the concept of “identity strategies”. But so far, it does not offer tools to clearly measure this construct. This is why in the present research they propose to develop a standardized psychometric instrument, making it possible to quantitatively assess the construction of identity strategies of migrant adolescents who school in a transcultural situation. It is organized around four facets/dimensions/subscales relating to Camouflage/Clandestinity/Self-Redefinition, Arrangement/Self-Display, Avoidance/Self-Repair and Denial/Cancellation of Self or Others. After calibration/validation with 368 migrant adolescents including 184 Central African refugees and 184 internally displaced persons from the Far North/North Cameroon, of both sexes, aged 12 to 18 years old, who school in the East region of Cameroon, the exploratory factor and components main characteristics analysis give it reliable metrological qualities (α_{items} [.68, .93]; $\alpha_{\text{QISISTglobal}} = .78$). Thus, the validity/reliability and internal consistency of the questionnaire are satisfactory.

Key Words: Identity Strategy, Migrant Adolescents, Transcultural Situation, Refugee, Internally Displaced Person

Introduction

En Afrique, le lien entre les contextes anthropologiques, leurs variations/changements et le développement de l'enfant/adolescent est une problématique qui nécessite une adresse heuristique rigoureuse; Car, la personnalité y semble tributaire des artefacts socioculturels qui déterminent significativement la construction de l'identité à la fois individuelle et groupale, ainsi que l'émergence/acquisition des compétences développementales. En effet, tout individu au cours de son développement en famille ou dans la société, intériorise des normes qui guident sa personnalité, ses orientations et ses aptitudes de base (Bonnet, 2010 ; Retschitzki, 2011). Cependant, les africains assignent les tâches culturelles séquentielles aux étapes de développement qu'ils reconnaissent. Ils perçoivent le développement comme un processus sociogénétique basé sur les croyances et les pratiques culturelles, guidant systématiquement la socialisation, l'éducation et les attentes requises pour chaque stade ontogénétique (Nsamenang, 2013). Dans cette logique, les transformations de l'individu étant le fruit de sa participation à la vie sociétale

(Latoki, 2010; Rizzi, 2014), les activités culturelles organisent mieux ses mutations évolutives via l'implication de soi dans des pratiques traditionnelles, considérées comme des pivots transitionnels du développement. Or débutant avec la puberté, l'adolescence marque l'entrée dans de nouveaux systèmes normatifs qui permettent au sujet de devenir agent de sa propre socialisation.

Par ailleurs, la construction de son identité et sa reconnaissance sociale progressive apparaissent comme les principaux enjeux de cette période. Mais face aux changements socioculturels imposés par les migrations, l'adolescent réfugié ou déplacé interne est confronté à la prise de conscience de sa dépendance affective et au nécessaire mouvement d'autonomie. Car, relativement forcé de se resocialiser sur fond de participation aux activités de la culture d'accueil, « *même s'il réussi à se forger une identité équilibrée (achevée), une crise éventuelle peut surgir et perturber l'équilibre, en exigeant la mise en place de nouveaux repères identitaires...* » (Maguiabou Tchidjo, 2015 : 126). En effet, devant se construire une double identité liée à la culture d'origine et à celle d'accueil, il fait face à une difficulté à concilier ces valeurs culturelles imposées par son éducation de base et les exigences liées au milieu d'accueil auquel il doit s'ajuster pour vivre en harmonie. D'où des conflits identitaires, car l'adolescent migrant se sent tiraillé entre la culture de son groupe ethnique d'origine/d'appartenance et un mode de vie transculturel qui retentissent différemment sur son adaptation sociale. On note ici un clivage entre un schéma (identité) collectif où l'adolescent migrant, qu'il soit réfugié ou déplacé interne, doit partager les mêmes aspirations/croyances/rituels et parfois la même apparence physique que ses pairs du milieu d'accueil. Or si « *trop de séparation mène à la désaffiliation, trop de ressemblance mène à la désindividualisation* » (Moro & Barou, 2003 : 9).

L'on s'aperçoit que lorsqu'on adresse la problématique du développement psychosocial et affectif en situation de variation culturelle, les conflits socio-identitaires requièrent l'essentielle des attentions. Car quand on change de milieu socioculturel, on traîne avec soi une identité de base qui a émergé de ce milieu anthropomorphiste et de ses niches développementales, en façonnant les premiers schémas cognitivo-comportementaux du sujet. Mais face aux attentes/exigences du milieu d'accueil, émerge une identité assignée qui crée des conflits et induit des inconforts socio-émotionnels. D'où l'intérêt pour la recherche de comprendre les mécanismes qui président à la construction des stratégies identitaires visant à s'y adapter. Paradoxalement, la quasi-absence des outils permettant d'en faire une évaluation objective constitue l'un des principaux obstacles à l'étude rigoureuse de ce construit qui est pourtant une compétence développementale observable/mesurable. La présente étude objecte de s'inscrire dans la démarche de Churchill (1979) pour y proposer une alternative.

Les stratégies identitaires dans le modèle socioculturel de Bajoit (2000)

La notion d'identité est polysémique et se définit en fonction de la discipline dans laquelle elle s'inscrit. Pour ce qui est des sciences humaines, elle s'organise autour d'une identité sociale impliquant le fait d'être soi-même tout en étant semblable aux autres, « *oscillant entre l'altérité radicale et la similarité totale* » (Bajoit, 2000 : 66); et d'une identité du moi/individuelle/personnelle qui est une acceptation simultanée de soi et des caractéristiques de son environnement d'appartenance, sous l'effet des forces sociales et culturelles (Erikson, 1972 ; Héroux, 2016). Quant aux stratégies identitaires, ce sont des actions psychologiques que l'individu mobilise pour atteindre un ou plusieurs buts socio-adaptatifs. Elles s'orientent en fonction de l'interaction et du contexte dans lequel elles se produisent (Camilleri, 1990, cité par Gutnik, 2002 : 121). Dans cette logique interactionniste, « *la notion de stratégie se situe à l'articulation du système social et de l'individu, du social et du psychologique ; elle permet de lire, dans les comportements individuels ou collectifs, les diverses manières dont les acteurs "font avec" les déterminants sociaux, et en fonction de quels paramètres familiaux ou psychologiques* ». Ainsi, les stratégies identitaires sont fonctions des contextes socioculturels et historico-psychologiques dans lesquels elles se produisent. Dans le contexte de refuge et de déplacement interne, leur construction et déploiement se justifient par le caractère potentiellement stigmatisant et parfois ethnocentrique des ressortissants du milieu d'accueil. Elles rendent compte de « *la bataille que livre le sujet, soit pour trouver une réponse à l'attribution d'une identité stigmatisante, soit pour réduire l'écart possible entre l'identité pour soi et l'identité pour autrui* » (Gutnik, 2002 : 9). On peut donc dire que les stratégies identitaires sont développées par les migrants dans un contexte socioculturel dans lequel ils doivent se reconstruire identitairement en tant que des individus qui ressemblent à ceux originaires du dit contexte, alors qu'ils diffèrent d'eux (Poujol, 2009).

D'après le modèle identitaire de Bajoit (2000) qui s'inscrit dans une perspective socioconstructiviste, l'identité fonctionnel du sujet dans toute situation socio-existentielle est la somme des identités sociale et du moi, ainsi que du concept de soi. Car ils se construisent au cours des différentes interactions sociales en fonction des contextes dans lesquelles ces interactions s'inscrivent. Ainsi, l'identité est une construction sociale et psychique qui s'inscrit dans un long processus au cours duquel des réaménagements doivent être faits en termes de (ré) conciliation identitaire entre les différentes composantes, à savoir : l'identité désirée qui renvoie à ce que l'individu voudrait être ; l'identité engagée qui renvoie à ce qu'il est et a été ; et l'identité assignée qui renvoie à ce qu'il croit que les autres voudraient qu'il soit. L'effort que l'individu fait pour concilier ces trois identités fait partie de ce que cet auteur appelle « le travail du sujet » ou « la gestion relationnelle de

soi''. Cet effort consiste à concilier son identité engagée et son identité assignée, c'est-à-dire, se faire reconnaître par les autres pour ce qu'on est et a été ; concilier son identité engagée et son identité désirée, c'est-à-dire, se reconnaître soi-même pour ce qu'on est et a été ; concilier son identité désirée et son identité assignée, c'est-à-dire, ce qu'on attend avec ce qu'on croit que les autres attendent de soi.

Les modalités des stratégies identitaires dans le modèle de Mellini (2009)

Des modifications majeures au modèle de Bajoit (2000) ont été faites par Mellini (2009) qui l'a structuré en paliers. En inscrivant l'identité dans une perspective socioculturelle, il l'organise autour de : l'identité ressentie basée sur une attirance physique et affective vers une culture désirée ou pas ; l'identité engagée pour soi en tant que membre d'une société/culture d'accueil, et pour les autres qui constituent son entourage culturel d'origine. Il dégage également un pallier objectif caractérisé par une identité assignée qui rend compte de ce que l'individu pense que les autres attendent de lui, souhaite pour lui, ou lui attribuent. Entre ces différentes composantes identitaires, peuvent surgir des « tensions » intra-orientées qui concernent l'individu dans son rapport à soi-même (palier subjectif de l'identité), et extra-orientées qui concernent l'individu dans son rapport aux autres (palier objectif de l'identité). La résolution de ces tensions intrapsychiques nécessite la mise en place des stratégies de réaménagements dites identitaires qui sont fonctions des individus et de leur contexte socioculturel. En effet, l'identité se construit sous l'influence de plusieurs facteurs qui sont d'ordre biologique, psychologique et socioculturel (Retschitzki, 2011). Les facteurs psychologiques d'après Marchand (2009), renvoient à l'image que l'individu se fait de lui-même, à ses croyances, aux représentations de soi qui constituent une structure psychologique lui permettant de sélectionner ses actions et ses relations sociales. En ce qui concerne les facteurs culturels, Rizzi (2014 : 33) montre que la culture est dispensatrice d'une identité à la fois individuelle et groupale où « *l'individu intériorise les modèles culturels qui lui sont imposés si bien qu'il s'identifiera à son groupe d'origine dès sa naissance* ». Mais comment un adolescent migrant qui vit dans un milieu relativement différent de sa culture d'origine, peut rester différent tout en cherchant la reconnaissance des autres dans un contexte socioculturel qui lui assigne une identité sans tenir compte de ses aspirations personnelles ? Pour gérer les effets socio-émotionnels de ces tensions identitaires, le sujet va mettre en place des mécanismes adaptatifs divers. Le but premier étant d'affirmer et défendre son identité hors-contrat qui reste à reconstruire malgré l'ethnocentrisme vécu dans le milieu d'accueil.

Dans le modèle de Mellini (2009), les stratégies identitaires qui conceptualisent ces mécanismes adaptatifs se déclinent en quatre composantes

à savoir : la “clandestinité” basée sur une acceptation de l’identité transculturelle engagée pour soi, mais pas pour les autres, et d’un camouflage par affichage factuel de soi comme de sa culture d’origine lorsqu’on est en présence des siens ; l’“arrangement” basé sur l’engagement à devenir membre de la culture d’accueil pour les « autrui significatifs » et le dévoilement de son identité transculturelle en tenant compte de la proximité avec les sujets semblables et ceux différents qui l’entourent (les siens) ; l’“affichage” basé sur un dévoilement plus étendu et sans restriction de son identité transculturelle sur « *le mode de la revendication fière ou de la normalisation discrète* » (Op.cit. : 19), et l’adoption du style de vie transculturel sur fond d’identification complète de soi à la culture d’accueil et d’hostilité à l’endroit des membres de sa culture de provenance ; le “déli” basé sur la méconnaissance de son obligation de vivre dans la culture d’accueil. Cette dernière stratégie se manifeste sous différentes formes à savoir : l’évitement, la redéfinition, la réparation et l’annulation de soi. L’évitement est un mode de résolution par formation réactionnelle, qui peut prendre des formes différentes. Toutes ces formes impliquent la dénégation ou le refus d’accepter son statut de réfugié ou de déplacé interne. Un individu qui adopte cette stratégie évite tout contact avec les personnes de la culture d’accueil. Il interagit exclusivement avec les personnes de sa culture d’origine tant dans ses relations occasionnelles que stables. La redéfinition consiste à vivre l’identité transculturelle qu’il intègre de façon progressive à son identité individuelle en construction. La réparation consiste à chercher les voies et moyens pour rentrer dans sa culture d’origine. L’annulation de soi se décline en plusieurs composantes à savoir : les idéations suicidaires, les tentatives de suicide, le suicide, la consommation de substances psychoactives. Elle apparaît comme une stratégie radicale pour se libérer des contrats narcissiques et des alliances inconscientes qu’impose à l’individu, une culture au détriment de ses aspirations culturelles de base.

Littérature psychométrique sur l’identité : Un bref état de la question

La littérature propose des instruments permettant d’évaluer l’identité chez l’individu. Cependant, ils présentent des insuffisances psychométriques majeures en matière de dévaluation des stratégies identitaires. En effet, Marsh (1990) a construit le *Self-Description Questionnaire* (SDQ) codé sur une échelle de type Likert à 6 points (1 = false ; ... ; 6 = true), pour mesurer l’identité sociale, individuelle et le concept de soi chez les adolescents âgés de 13 à 17 ans. Mais il apparaît plus comme un rapport subjectif constitué de 102 items organisés autour de 11 sous-échelles, rendant compte de ce construit dans trois domaines. Ces domaines prennent néanmoins en compte quelques aspects socio-identitaires à savoir : académique (verbal et scolaire) ; non académique (habiletés physiques, apparence physique, relations avec les pairs

du sexe opposé, relations avec les pairs de même sexe, honnêteté/confiance et stabilité socio-émotionnelle); général (habitudes, goûts, préférences culturels). Mais, bien qu'ayant fait l'objet de nombreuses analyses psychométriques qui supportent la sensibilité, la fidélité et la validité, avec une cohérence interne acceptable (*alpha de Cronbach* (α) = .88), cette échelle ne permet pas une évaluation psychométrique directe de la construction des stratégies identitaires.

Par ailleurs, en s'inspirant du modèle des tâches développementale à l'adolescence de Damon (1983) et du SDQ, Emond (1996) a conçu un questionnaire constitué de cinq sous-échelles correspondant à ces tâches à savoir : la sous-échelle d'amitié, mesurant le support émotionnel/intimité et la loyauté/confiance ; la sous-échelle de sexualité, mesurant la conscience/satisfaction/épanouissement sexuelle ; la sous-échelle de séparation-individuation, mesurant l'autonomie/indépendance ; la sous-échelle de pensée sociopolitique, mesurant la moralité autonome/post-conventionnelle ; et la sous-échelle du concept de soi global, mesurant la valeur/satisfaction de soi et la confiance en soi. Cette dernière, bâtie sur le nom de *Général Self Scale* et constituée de 10 items. Elle mesure le concept de soi général du sujet comme acceptation de ses propres actions et sentiments de confort puis d'appartenance, associé à l'image de soi et sens général d'un bien-être social. Ces items sont : *Overall, I have a lot to be proud of (item1)* ; *Overall, I am good (item2)* ; *Most things I do well (item3)*; *Nothing I do ever seems to turn out right (item4)*; *Overall, most things I do turn out well (item5)*; *I don't have much to be proud of (item 6)*; *I can do things as well as most people (item 7)*; *I feel that my life is not very useful (itm8)*; *If I really try I can do almost anything I want to do (item 9)*; *Overall, I'm a failure (Item 10)* (Emond, 1996). Mais cette méthode semble plus évaluer l'estime de soi que l'identité proprement dite, et donc, ne mesure pas réellement la construction des stratégies identitaires, surtout lorsqu'on est en situation de migration ou de changement socioculturel. Ce qui remet en cause sa rigueur dans le respect non seulement des principes de théorisation suffisante du construit, mais surtout d'équité/standardisation et de qualité de mesure dans sa validation. Or le paradigme de Churchill (1979) relève la nécessité de théorisation du construit précis, d'exhaustivité des items, d'homogénéité et de représentativité dans la construction et la validation des instruments psychométriques. En effet, les outils relevés plus haut n'évaluent pas clairement ce construit, encore moins telle que appréhendé dans la présente recherche. Il est donc nécessaire de d'élaborer une mini-échelle qui permet de mesurer clairement tous ses aspects. Ce faisant, l'on procède dans cette étude, au développement et à la première validation d'un instrument psychométrique standardisé, permettant d'évaluer quantitativement la construction des stratégies identitaires chez les adolescents migrants scolarisés en situation transculturelle.

Méthode

Participants

Ont participé à la présente étude, 368 adolescents dont 184 réfugiés centrafricains et 184 déplacés internes Extrême-Nord/Nord camerounais. Ils vivent dans la Région de l'Est du Cameroun, précisément dans les Arrondissements de *Mandjou*, *Bétaré-Oya* et *Garoua-Boulai*, Département du *Lom-et-Djérem*. Ils sont tous âgés de 12 à 18 ans, des deux sexes, scolarisés au moins jusqu'en fin de premier cycle du secondaire, sans antécédent psychiatrique ni médical. Ils sont totalement ou partiellement en situation transculturelle, car vivent dans des communautés culturellement différentes de leurs origines. En effet, le milieu d'accueil est de culture *Baya* divisée en 02 Cantons (*Gbaguinda* et *Bodomo*), alors que ces adolescents migrants viennent des communautés *Mbororo*, *Foulbé* et *Haoussa* (Catholic Relief Services [CRS], entretien avec une unité déclarante, 24/10/2018).

Matériel et procédure

La littérature ne propose pas d'outil psychométrique évaluant la construction des stratégies identitaires chez des adolescents migrants et scolarisés/vivant en contexte transculturel, qui présente des qualités métrologiques avérées. Or il en existe pour l'identité, l'estime de soi et le concept de soi. Dans la présente recherche, l'on y trouve une solution en construisant un mini-questionnaire standardisé, rendant compte de ce mécanisme socio-adaptatif, comme stratégie d'aménagement psychologique ou de résolution des conflits identitaires en situation de changement socioculturel. Il s'agit de pouvoir quantifier les stratégies que les adolescents migrants scolarisés construisent à la fois en tant que redéploiement de leurs identités individuelles et sociales dans leur vécu socio-émotionnel quotidien ; et comme conciliatrices des identités ressenties, désirées ou engagées, avec l'identité à eux assignée dans un milieu socioculturel différent de leurs cultures de base/d'origine.

L'élaboration de cette mini-échelle psychométrique a consisté tout d'abord à s'inspirer de la littérature portant sur la culture et le développement de l'identité pour définir/circonscrire clairement le domaine du construit ou de la variable théorique à évaluer. Par la suite, le modèle typologique des mécanismes de construction socio-identitaire de Mellini (2009) a permis d'identifier ses facettes/modalités/dimensions, puis générer un échantillon d'items sur leurs indicateurs, considérés ici comme facteurs ou composantes principaux des stratégies identitaires. Ainsi, autour des quatre (4) facettes, l'on a d'abord généré 15 items, dont cinq (5) pour la première, trois (3) pour la seconde, quatre (4) pour la troisième et trois (3) pour la quatrième. Considérés comme des sous-échelles de l'instrument, ces facettes sont respectivement, le camouflage/ clandestinité/redéfinition de soi, l'arrangement/affichage de soi,

l'évitement/réparation de soi, le déni/annulation de soi ou d'autrui. En suivant le paradigme de Churchill (1979), l'on a fait un test préalable auprès des personnes proches des unités d'analyse cibles de l'étude. Il s'agit notamment de 50 adolescents réfugiés centrafricains et 50 adolescents déplacés internes Extrêmes-Nord/Nord-camerounais vivant tous dans l'arrondissement de Bertoua 2^{ième} (Région de l'Est du Cameroun). Ceci visait à éprouver chaque item et relever s'il est compréhensible pour les participants. L'on a associé à cette phase de validation, l'avis d'un psychologue du développement expérimenté sur les questions de construction identitaire. Ce qui a donné de supprimer deux (2) items pour la première sous-échelle ("Je ne fait que semblant d'aimer ou de rester avec les gens d'ici, mais au fond je force seulement" et "C'est parce que je suis obligé que je fréquente avec ceux qu'on a trouvé ici, ils m'énervent et je fais avec eux"); et un (1) item pour la troisième ("Je ne peux être un jour tranquille que si la guerre fini complètement et je me retrouve dans mon quartier d'où je viens"), pour non fiabilité psychométrique. En effet, plus de 30% des répondants n'ont pas donné un avis à ces énoncés. Ce qui a remis totalement en cause leur sensibilité.

A la suite de ce pré-test, une mini-échelle définitive baptisée "Mini-Questionnaire d'Inventaire des Stratégies Identitaires en Situation Transculturelle (QISIST)" a été conçue, pour être remplie pendant une durée de cinq (5) à dix (10) minutes. Elle est constituée de 12 items codés sur échelle de type Likert à 5 points notamment : 1 = Pas du tout vrai ; 2 = Un peu vrai ; 3 = Modérément vrai ; 4 = Assez vrai ; 5 = Très vrai. La tâche et la consigne principales étant de cocher pour chacun des items, la case correspondant au numéro de la réponse qui est la plus appropriée au participant. Ceci permet de mesurer sa conception de soi dans une dimension académique et non-académique, basée sur la confiance en soi et la satisfaction de soi. Ce mini-questionnaire évalue précisément la relation avec les pairs, l'intégration dans la communauté d'accueil, la perception des autres, la satisfaction par rapport à sa vie scolaire transculturelle, la relation avec sa culture d'origine et celle d'accueil. Il s'organise autour des quatre (4) principales facettes ou stratégies identitaires relevées ci-dessus comme sous-échelles du mini-questionnaire, évaluées chacune par trois (03) items.

La première sous-échelle est relative au Camouflage/Clandestinité/Redéfinition de soi (QISIST 1 : C/C/R). Elle évalue la tendance du sujet à faire semblant d'être de la culture d'accueil, adoptant ses habitudes vestimentaires/alimentaires et en cherchant à parler la langue locale juste pour être à l'aise dans ses activités quotidiennes, mais au fond n'accepte pas ces réalités. Son item 2 est "Quand je suis avec mes frères réfugiés/déplacés internes de chez nous je suis mieux, mais quand je mène mes activités je fais comme si j'étais d'ici". La deuxième sous-échelle concerne

l'Arrangement/Affichage de soi (QISIST 2 : A/A). Elle évalue la tendance du sujet à se définir comme étant du milieu d'accueil, à s'afficher dans toute la configuration culturelle de ce milieu, cherchant activement la proximité avec les pairs qui y sont originaires. Son item 1 est "J'aime la façon et le style de vie des gens d'ici, et par tout ou je suis, je fais aussi comme eux". La troisième sous-échelle correspond à l'Évitement/Réparation de soi (QISIST 3 : E/R). Elle évalue la tendance du sujet à manifester des comportements d'aversion de contacts avec ses pairs originaires du milieu d'accueil et à vouloir absolument rentrer chez eux. Son item 3 est "Je cherche comment retourner chez nous pour faire comme chez nous étant à l'aise". La quatrième sous-échelle porte sur le Déni/Annulation de soi ou d'autrui (QISIST 4 : D/A). Elle évalue la tendance du sujet à refuser totalement qu'il est dans un milieu autre que son milieu d'origine, à développer des violences vis-à-vis de ceux de la culture d'accueil, avec des idéations suicidaires. Son item 1 est "Si je reste trop ici, je sens que je dois finir par me suicider, car je refuse de faire comme les gens d'ici et je ne supporte plus d'être loin de chez nous".

Pour sa cotation, les scores sont obtenus et analysés en comptabilisant le score (1, 2, 3, 4 ou 5) à chacun des items de Camouflage/Clandestinité/Redéfinition de soi (Min = 0 ; Moy = 7,5 ; Max = 15), d'Arrangement/Affichage de soi (Min = 0 ; Moy = 7,5 ; Max = 15), d'Évitement/Réparation de soi (Min = 0 ; Moy = 7,5 ; Max = 15) et de Déni/Annulation de soi ou d'autrui (Min = 0 ; Moy = 7,5 ; Max = 15). Un résultat élevé indique selon les cas que l'individu développe majoritairement une des stratégies identitaires. Ainsi, pour chaque sous-échelle, l'on doit calculer l'écart entre le score du participant et son score moyen (Écart-Moyen (EM). La ou les sous-échelle (s) où l'Écart-Moyen est plus élevé indique la ou les stratégie (s) identitaire (s) la ou les plus régulièrement construite (s) par l'individu.

Pour sélectionner les 368 participants, un questionnaire d'identification a été d'abord administré pour recueillir des informations biographiques sur chaque participant, son lien ou sa vie avec sa famille (parents, fratrie et collatéraux) et ces antécédents médicaux, cliniques ou psychiatriques. Ainsi un test sélectif de stabilisation/homogénéisation/standardisation a été passé notamment, la version traduite par Weiss et Marmar (1997) de l'*Impact of Event Scale* (IES), composée de quinze (15) items évaluant l'Intrusion dérangeante (Items 1, 4, 5, 6, 10, 11, 14) et l'Évitement (Items 2, 3, 7, 8, 9, 12, 13, 15) et ré-étalonnée/adaptée avec un alpha de *Cronbach* global (α) = .91 et une fidélité ($r_{\text{test-re-test}}$) = .62. Cet exercice a permis d'inclure uniquement ceux qui ne présentent que des symptômes légers/mineurs de l'Etat de Stress Post-traumatique (ESPT) ou n'en manifestent pas du tout, vu leur entrave au développement socio-affectif (Zerach & Solomon, 2018) ; et ceux n'ayant

jamais présenté ou ne présentant pas de symptômes de carence alimentaire, vu leurs retentissements psychiques (affectif et cognitif) (Barberger-Gateau & Berr, 2004). Au demeurant, ceci a favorisé une nouvelle collecte des données comme le stipule l'avant dernière étape du paradigme classique de Churchill (1979), suivi d'un étalonnage et de l'estimation via une analyse statistique rigoureuse, des qualités métrologiques de l'instrument.

Résultats

La validation d'un instrument de mesure est principalement fondée sur la satisfaction que procurent ses qualités métrologiques. Ainsi, en s'appuyant sur les usages de l'esprit psychométrique (Messanga, Kenne Tiotsop, & Nzeuta Lontio, 2020 ; Messanga & Nzeuta Lontio, 2020), l'on fournit dans les résultats de la présente étude les paramètres métriques sur la structure interne du Mini-Questionnaire d'Inventaire des Stratégies Identitaires en Situation Transculturelle. Tout d'abord, l'analyse factorielle exploratoire (AFE) et en composantes principales (ACP) a rendu compte de la qualité d'échantillonnage, de la saturation entre ses dimensions/composantes et du degré de mesure réelle du construit évalué. Puis, la statistique descriptive et les indices de corrélation test-ré-test ont favorisé l'estimation de sa fiabilité psychométrique (fidélité, sensibilité/validité/cohérence interne). Ensuite, les indices d'association linéaires des sous-échelles et l'analyse de la variance des scores ont montré ses liaisons inter-dimensionnelles, ainsi que sa validité discriminante. Enfin, les matrices des points-variables présentées sur les graphiques/cartes factorielles ont permis de décrire sa structure ou son homogénéité interne et celle de ses sous-échelles.

Analyse factorielle exploratoire, variances expliquées et axes d'inertie des composantes principales

Tableau 1. Matrice de présentation des indices de KMO, du test de sphéricité de Bartlett et des valeurs propres initiales des composantes (CP) principales du QISIS

	Indices de KMO et test de sphéricité de Bartlett				Valeurs propres initiales (λ)			
	Indice KMO	Khi approx. 2	Ddl.	Sig. p	CP	Total	% variance	% cumulé
Echelle globale (QISIST)	.812	858.338	66	.000	1	3.456	28.803	28.803
					2	1.673	13.938	42.741
					3	1.018	8.483	51.224
QISIST₁ (C/C/R)	.734	96.469	3	.000	1	1.614	53.784	53.784
QISIST₂ (A/A)	.727	81.417	3	.000	1	1.530	51.000	51.000
QISIST₃ (E/R)	.759	71.365	3	.000	1	1.523	50.758	50.758
QISIST₄ (D/A)	.650	199.032	3	.000	1	1.847	61.564	61.564

Notes: QISIST = Mini-Questionnaire d'Inventaire des Stratégies Identitaires en Situation Transculturelle ; QISIST₁ (C/C/R) = Dimension Camouflage/Clandestinité/Redéfinition de soi ; QISIST₂ (A/A) = Dimension Arrangement/Affichage de soi ; QISIST₃ (E/R) = Dimension Evitement/Réparation de soi ; QISIST₄ (D/A) = Dimension Déni/Annulation de soi ou autrui ; CP = Composante principale.

Source : Données de terrain de Janvier à Février 2020

Les indices de Kaiser-Meyer-Olkin (KMO) et le test de sphéricité de Bartlett sont assez significatifs pour favoriser l'analyse factorielle sur les items du Mini-Questionnaire d'Inventaire des Stratégies Identitaires en Situation Transculturelle (QISIST). Ainsi, à partir des données factorisées, ils attestent des liaisons positives fortement significatives entre ses dimensions/facettes, avec des indices d'adéquation ou d'échantillonnage de bonne qualité. Cependant, l'AFE et l'ACP rendent compte de 3 facteurs ou composantes principales pour le mini-questionnaire globale, 1 facteur pour chacune de ses dimensions, avec des valeurs initiales propres supérieure à 1 et des solutions factorielles satisfaisantes. En effet, tandis que le QISIST global peut recueillir 56.784% des informations sur les Stratégies Identitaires en Situation Transculturelle, le QISIST₁ (C/C/R), le QISIST₂ (A/A), le QISIST₃ (E/R) et le QISIST₄ (D/A) peuvent en recueillir respectivement 53.784% sur le Camouflage/Clandestinité/Redéfinition de soi, 51.000% sur l'Arrangement/Affichage de soi, 50.758% sur l'Evitement/Réparation de soi et 61.564% sur le Déni/Annulation de soi ou d'autrui. Donc le mini-questionnaire élaboré fournit des informations riches en quantité et en qualité sur le construit qu'on évalue chez les adolescents migrants. Ce qui rend nécessaire la description de ses scores auprès des participants et l'estimation de sa fiabilité psychométrique.

Statistique descriptive et la fiabilité psychométrique de la mini-échelle et de ses sous-échelles

Tableau 2. Paramètres descriptifs des scores, fidélité et cohérence interne du QISIST

	M/É-T	MS/ÉM	Indice de fidélité (r _{test-re-test})	Indice Alpha (α)	Variation d'Alpha par item
Mini-Echelle globale (QISIST)	29.11/11.19	30/-0.89	.76	.78	[.68, .93]
QISIST₁ (C/C/R)	8.28/3.57	7.5/.78	.83	.71	I ₁ = .69 ; I ₁ = .70 ; I ₁ = .73
QISIST₂ (A/A)	8.06/4.27	7.5/.56	.61	.77	I ₁ = .74 ; I ₁ = .89 ; I ₁ = .68
QISIST₃ (E/R)	7.49/4.64	7.5/-0.01	.81	.75	I ₁ = .73 ; I ₁ = .76 ; I ₁ = .75
QISIST₄ (D/A)	5.30/2.99	7.5/-2.20	.77	.87	I ₁ = .78 ; I ₁ = .83 ; I ₁ = .93

Notes : M = Moyenne ; É-T = Écart-Type ; MS = Moyenne standard ; EM = Écart-Moyenne

Source : Données de terrain de Janvier à Février 2020

A partir des statistiques descriptives (Moyenne ; Écart-Type) obtenues dans les deux strates d'adolescents migrants (Réfugiés et Déplacés internes),

on dégage une forte variation des scores au mini-questionnaire global et à ses différentes facettes/dimensions. En plus, les paramètres de dispersion (Moyenne standard ; Écart-Moyenne) indiquent que les participants construisent majoritairement le Camouflage/Clandestinité/Redéfinition de soi, suivi de l'Arrangement/Affichage de soi, puis de l'Évitement/Réparation de soi et très peu de Déni/Annulation de soi ou d'autrui, comme Stratégies Identitaires. Il importe de rappeler ici la norme de cotation énoncée plus haut : « La ou les sous-échelle (s) où l'Écart-Moyen est plus élevé indique la ou les stratégie (s) identitaire (s) la ou les plus régulièrement construite (s) par l'individu » (Voir Méthode, B, Parag. 5, Dernière phrase). Cependant, les indices de corrélation test-ré-test et d'alpha de *Chronbach* générés démontrent respectivement une fidélité et une cohérence interne significativement satisfaisantes, tant au niveau des items que des sous-échelles et du mini-questionnaire global. D'où l'utilité d'analyser l'association linéaire et la variation inter facettes/items de cet instrument.

Liaison inter-dimensionnelle et relation inter/intra groupes du QISIST chez les réfugiés et les déplacés internes

Tableau 3. Association linéaire de Pearson (r) et variation inter facettes/items du QISIST

Corrélation inter-facettes/dimensions de Pearson						
	Mini-Echelle globale (QISIST)	QISIST ₁ (C/C/R)	QISIST ₂ (A/A)	QISIST ₃ (E/R)	QISIST ₄ (D/A)	
Mini-Echelle globale (QISIST)	1					
QISIST ₁ (C/C/R)	.724**	1				
QISIST ₂ (A/A)	.735**	.462**	1			
QISIST ₃ (E/R)	.773**	.405**	.306**	1		
QISIST ₄ (D/A)	.632**	.230**	.302**	.426**	1	
ANOVA						
		Somme des carrés (SC)	Ddl	Moyenne des carrés (MC)	F	Sig.
QISIST ₁ Réfugiés*QISIST ₁ Déplacés Internes	Inter groupe	3030.359	45	67.341	13.227	.000
	Intra groupe	1639.369	322	5.091		
	Total	4669.728	367			
QISIST ₂ Réfugiés*QISIST ₂ Déplacés Internes	Inter groupe	4960.665	45	110.237	20.572	.000
	Intra groupe	1717.136	322	5.333		
	Total	6677.802	367			
QISIST ₃ Réfugiés*QISIST ₃ Déplacés Internes	Inter groupe	6334.347	45	140.763	28.804	.000
	Intra groupe	1573.585	322	4.887		
	Total	7907.932	367			
QISIST ₄ Réfugiés*QISIST ₄ Déplacés Internes	Inter groupe	1899.683	45	42.215	9.817	.000
	Intra groupe	1384.622	322	4.300		

	Total	3284.304	367			
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Notes: **. La corrélation est significative au niveau .01 bilatéral. ANOVA = Analyse de la variance ; Ddl = Degré de liberté ; F = Indice de Fischer Snedecor ; Sig.= Probabilité de validité (selon le seuil de signification).

Source : Données de terrain de Janvier à Février 2020

L'on note une de très fortes corrélations entre le mini-questionnaire global et ses sous-échelles. Ce qui démontre un lien positif et significatif entre les Stratégies Identitaires en Situation Transculturelle et les dimensions de ce construit. En observant les indices de corrélations entre les différentes sous-échelles, l'on relève qu'il existe des liaisons positives entre ces dimensions. Cependant, prenant en compte les sous groupes d'âges et de sexe dans les deux strates des participants (réfugiés et déplacés internes), on note une variation globale significative des scores dans chaque dimension. Variation qui se montre plus significative/forte lorsqu'on passe d'un groupe à l'autre (intergroupe), qu'à l'intérieur d'un même groupe (intragroupe). De ce qui précède, l'on relève que la méthode psychométrique construite a des qualités métrologiques satisfaisantes. Toutefois, il semble utile de visualiser sa structure interne sur des représentations graphiques.

Analyse de la structure interne du QISIST : Matrice des points-variables

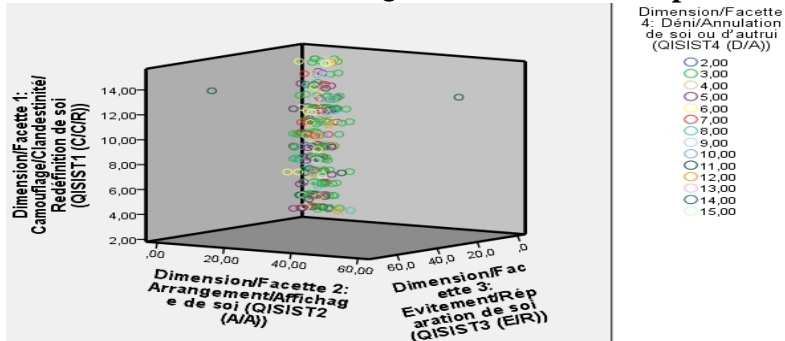


Figure 1. Carte/graphique factorielle du Mini-Questionnaire d'Inventaire des Stratégies Identitaires en Situation Transculturelle : QISIST

Source : Données de terrain de Janvier à Février 2020

A partir de la disposition des points-variables, l'on note un regroupement dans la partie centrale du graphique factoriel, avec une excentration d'un point du QISIST₁ à gauche et d'un autre du QISIST₃ à droite. Dans cette logique de rotation, la carte indique que les facteurs ou composantes principales du mini-questionnaire globale et de chacune de ses dimensions/facettes subit des changements certes, mais qui restent non significatifs dans la projection orthogonale des variables mesurées. Ainsi, l'on y relève une structure/homogénéité interne satisfaisante, avec un degré de

dépendance inter-items qui corrobore à suffisance le niveau de corrélation élevé/significatif entre les dimensions/sous-échelles du questionnaire.

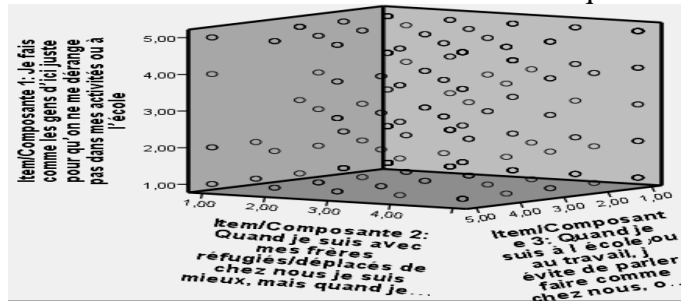


Figure 2. Carte/graphique factorielle des composantes de la dimension Camouflage/Clandestinité/Redéfinition de soi : QISIST₁ (C/C/R)
Source : Données de terrain de Janvier à Février 2020

Il ressort de cette carte factorielle, une dispersion significative des points-variables indiquant une faible saturation des scores aux items de la sous-échelle QIQIST₁ (C/C/R). Cette dispersion qui semble plus forte pour les items 2 et 3, montre que la distribution des biais sur cette dimension est faible, mais semble plus excentrique pour les deux derniers items qui constituent sa composante principale.

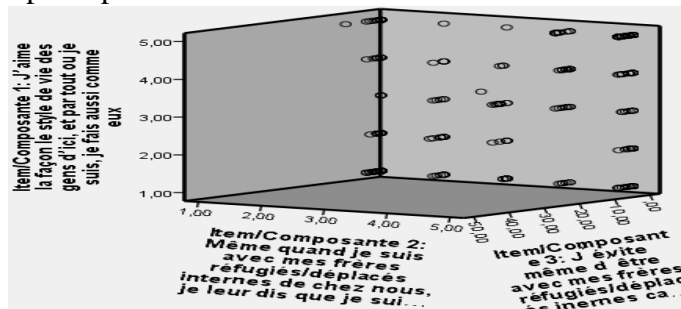


Figure 3. Carte/graphique factorielle des composantes de la dimension/sous-échelle Arrangement/Affichage de soi : Le QISIST₂ (A/A)
Source : Données de terrain de Janvier à Février 2020

Pour la dimension Arrangement/Affichage de soi, les points-variables des trois items sont concentrés dans la façade droite partant du centre du graphique factoriel. Ceci indique une forte convergence des variables de la sous-échelle QISIST₂ (A/A) vers une même composante principale portée par l'item 3. Cette disposition y confirme moins de changement factoriel, mais un degré d'homogénéité interne satisfaisant.

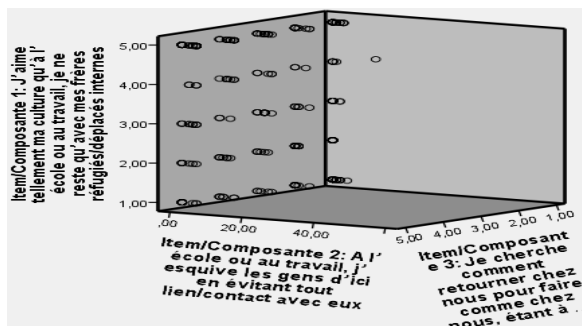


Figure 4. Carte/graphique factorielle des composantes de la dimension/sous-échelle Evitement/Réparation de soi : QISIST₃ (E/R)
Source : Données de terrain de Janvier à Février 2020

Les variables de la sous-échelle QISIST₃ (E/R) convergent vers une même composante principale portée par l’item 1 dont les points sont concentrés dans la façade gauche, partant du centre de la carte factorielle. Ceci indique que la structure interne de la dimension Evitement/Réparation de soi a un niveau de saturation suffisant pour une bonne validité.

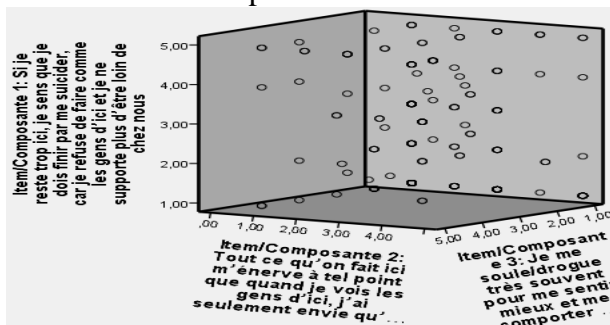


Figure 5. Carte/graphique factorielle des composantes de la dimension/sous-échelle Déni/Annulation de soi ou d’autrui : QISIST₄ (D/A)
Source : Données de terrain de Janvier à Février 2020

Pour la dimension Déni/Annulation de soi ou d’autrui, les points-variables indiquent une dispersion plus forte avec une distribution plus concentrique des biais non significatifs sur l’item 3. On note cependant quelques points des items 1 et 2 de cette sous-échelle qui convergent faiblement vers le centre du graphique factoriel. Ce qui implique que le QISIST₄ (C/C/R) a une composante principale portée conjointement par tous ses items avec une proportion élevée sur le dernier.

Discussion

Développer et valider un instrument psychométrique standardisé permettant d'évaluer quantitativement la construction des stratégies identitaires chez les adolescents migrants scolarisés en situation transculturelle, constituait la mission principale de cette recherche. Ce faisant, les étapes du paradigme classique de Churchill (1979) ont présidé au respect de la rigueur dans l'élaboration du Mini-Questionnaire d'Inventaire des Stratégies Identitaires en Situation Transculturelle (QISIST), organisé autour de quatre facettes/dimensions/sous-échelles notamment, le Camouflage/Clandestinité/Redéfinition de soi (QISIST 1 : C/C/R), l'Arrangement/Affichage de soi (QISIST 2 : A/A), l'Évitement/Réparation de soi (QISIST 3 : E/R) et le Dénier/Annulation de soi ou d'autrui (QISIST 4 : D/A). Ces dimensions émanent d'un cadre théorique et d'une littérature spécialisée sur le construit à évaluer/mesurer, ainsi que ses modalités, facteurs ou composantes. Ce qui a donné de générer d'abord un échantillon d'items, puis procéder à un pré-test qui a favorisé leur réduction et reformulation, avant d'aboutir au mini-questionnaire définitif qui respecte les normes et principes standards régissant l'esprit/ingénierie psychométrique (Roulin, 2017 ; Tiwari, Patel, & Kumar, 2017).

En effet, en observant les principes d'équité/standardisation entre les répondants, de quantification et de qualité de mesure (Tay & Jebb, 2017), les indices métriques calculés sur cette échelle d'auto-évaluation (Ruiller, 2008) lui consacrent des propriétés et qualités métrologiques fiables et satisfaisantes. Ceci s'affirme tant au niveau de sa sensibilité, sa validité, sa fidélité et sa cohérence interne, que des analyses factorielles exploratoires et en composantes principales faites. Ce qui corrobore avec la littérature psychométrique qui définit le cadre normatifs en matière d'étalonnage et de validation des instruments de mesures (Bernaud, 2014). Car le QISIST global et ses sous-échelles donnent des résultats satisfaisants auprès d'un échantillon suffisamment représentatif d'adolescents migrants, différencié en sexes (141 filles (77 réfugiés et 64 déplacés internes), 227 garçons (107 réfugiés et 120 déplacés internes) ; en âges (34 de 12-14 ans (17 réfugiés et 17 déplacés internes), 334 de 15-18 ans (167 réfugiés et 167 déplacés internes)), et en origine/provenance (187 réfugiés et 187 déplacés internes). Étant donné que les indices apportés par la méthode d'alpha de *Cronbach*, la vérification des poids et des structures factoriels avec les pourcentages d'inertie cumulés obtenus sur les facteurs retenus se situent au dessus des seuils standards (.60, .70, etc.).

Conclusion

Au regard même de la structure interne du mini-questionnaire global et de ses sous-échelles, factorisée et visualisée sur les cartes/graphiques factorielles, vu le fait que la validité d'un questionnaire psychométrique est

aussi tributaire de sa capacité à renseigner sur la variabilité inter et intra individuelle (Trochim, 2006), l'on peut affirmer que le Mini-Questionnaire d'Inventaire des Stratégies Identitaires en Situation Transculturelle (QISIST) construit et validé dans cette recherche est fiable du point de vue psychométrique. À cet effet, l'on propose de l'adopter comme outil métrique, permettant d'évaluer quantitativement la construction des stratégies identitaires chez les adolescents migrants scolarisés en situation transculturelle, surtout en contexte Afrique francophone. Ceci en ouvrant la voie à d'autres investigations dans l'optique de son perfectionnement, de sa traduction et de son adaptation-réétalonnage. L'idéal étant d'augmenter sa légitimité scientifique pour un large spectre d'emploi dans l'étude de l'adaptation sociale en situation de changement culturel en Afrique.

References:

1. Bajoit, G. (2000). Notes sur la construction de l'identité personnelle. *Recherches sociologiques*, 2, 69-84.
2. Barberger-Gateau, P. & Berr, C. (4-5 novembre 2004). Nutrition and cognitive decline: data from Paquid and Eva epidemiologic studies. Communication présentée au 4^{ème} Congrès Européen sur la nutrition, la santé et le vieillissement, Toulouse.
3. Bernaud, J.-L. (2014). *Méthodes de tests et questionnaires en psychologie*. Paris : Dunod. En ligne : <http://excerpts.numilog.com/books/9782100587957>. Consulté 12/11/2020.
4. Bonnet, D. (2010). La construction sociale de l'enfance : une vérité de normes et de contextes. *Informations sociales*. 4, 160, 12-18.
5. Churchill, G. A. (1979). A paradigm for developing better measures or marketing constructs. *Journal of Marketing Research*, 16(1) 64-73.
6. Damon, W. (1983). *Social and personality development: Infancy through adolescence*. New York: Cambridge University.
7. Emond, C. (1996). Relation entre tâches développementales, concept de soi et symptomatologie dépressive : étude transversale en milieu et fin de l'adolescence. Thèse doctorat. Canada : Ecole de psychologie, école des études supérieures de l'Université d'Ottawa.
8. Erikson, E. H. (1972). *Adolescence et crise. La quête de l'identité*. France : Flammarion.
9. [Gutnik, F. (2002). Autour des mots, « stratégies identitaires », « dynamiques identitaires ». *Recherche et formation*, 41, 119-130. En ligne : https://www.persee.fr/doc/refor_09881824_2002_num_41_1_1778. Consulté le 18/03/2019.

10. Héroux, A. T. (2016). La perturbation identitaire chez le trouble de la personnalité limite : Réflexion sur les aspects théoriques, empiriques et sur la mesure (Thèse de doctorat, Université du Québec, Québec). En ligne : <http://depot-e.uqtr.ca/id/eprint/7863>. Consulté le 15/05/2019.
11. Latoki, P-E. (2010). La religion comme quête de l'ordre dans la société africaine traditionnelle. Les cahiers psychologie politique, 16. En ligne : <http://odel.irevues.inist.fr/cahierspsychologiepolitiqu/index.php?id=1415>. Consulté le 28/09/2018.
12. Maguiabou Tchidjo, A. (2015). Grossesse précoce et construction de l'identité maternelle chez l'adolescente camerounaise. Thèse de doctorat en psychologie du développement. Cameroun : Université de Yaoundé I.
13. Marchand, R. (2009). Influences de la culture et de l'identité sur l'apprentissage du F.L.E. : Etude comparative des enseignements/apprentissages en France et en Chine. Thèse, de doctorat. France : Université de Lorraine. En ligne : www.theses.fr/2009NAN21026. Consulté le 14/02/2019.
14. Marsch, H. W. (1990). Self Description Questionnaire-II. Campbelltown, Australia :University of Western Sydney, Macarthur.
15. Mellini, L. (2009). Entre normalisation et hétéronormativité : la construction de l'identité homosexuelle. *Déviance et Société*, 1 (33), 3-26.
16. Messanga, G. A. & Nzeuta Lontio, S. (2020). Construction et Validation d'une Échelle d'évaluation du Tribalisme dans les Relations Intergroupes. *European Scientific Journal*, 16, (10), 195-215. En ligne : <http://dx.doi.org/10.19044/esj.2020.v16n10p195>. Consulté 07/12/2020.
17. Messanga, G. A., Kenne Tiotsop, L. & Nzeuta Lontio, S. (2020). Construction et Validation D'une Méthode D'évaluation D'évaluation Du Tribalisme Aversif. *International Multilingual Journal of Science and Technology (IMJST)*, 5(11), 1896-1907. En ligne: <http://imjst.org/index.php/vol-5-issue-11-November-2020/>. Consulté 5/12/2020.
18. Moro, M. R. & Barou, J. (2003). Les enfants de l'exil : Etude auprès des familles en demande d'asile dans les centres d'accueil. France : Sonacotra & Unicef.
19. Nsameng, A. B. (2013). Dilemmas of Rights-Based Approaches to ChildWell-Being in an African Cultural Context. In D. J. Johson, D. L. Agbényiga, R. K. Hitchcock (Eds.), *Vulnerable Children: Global Challenges in Education, 13 Health, Well Being, and Child Rights* (PP. 13-25), New York: Hardcover.

20. Paduart, P. (2004). Psychisme et culture. *Revue Belge de Psychanalyse*, 45. En ligne : [http://www.gercpea.lu/textes_livres/psychisme et culture_P_Paduart.pdf](http://www.gercpea.lu/textes_livres/psychisme_et_culture_P_Paduart.pdf). Consulté le 12/01/ 2019.
21. Poujol, J. (2009). *L'accompagnement psychologique et spirituel*. France : L'Empreinte ;
22. Retschitzki, J. (2011). La culture en tant que facteur du développement cognitif. *Alterstice*, 1(1), 81-84.
23. Rizzi, T. A. (2014). *Entre ici et là-bas, je vous dessine mon chez moi : Exploration qualitative des productions des enfants en psychothérapie transculturelle*. Thèse de doctorat. France : Université Paris Descartes. En ligne : <https://tel.archives-ouvertes.fr/tel-01195999>. Consulté le 28/01/2019.
24. Rogoff, B. (2003). *The cultural nature of human development*. Oxford, England: Oxford University Press.
25. Roulin, J. L. (2017). *Savoir, Comprendre, Apprendre. Leçons de psychométrie*. Université Savoie Mont Blanc. En ligne : <https://www.psychometrie.jlroulin.fr>. Consulté 24/11/2020.
26. Ruiller, C. (2008). *Le soutien social au travail : conceptualisation, mesure et influence sur l'épuisement professionnel et l'implication organisationnelle : L'étude d'un cas hospitalier*. Thèse de doctorat. France : Université Rennes 1.
27. Tay, L. & Jebb, A. (2017). Scale Development. In S. Rogelberg (Éd.), *The Sage Encyclopedia of Industrial and Organizational Psychology*. Sage: Thousand Oaks, CA.
28. Tiwari, S. K., Patel, A.K., & Kumar, D. (2017). Development of Perceived Discrimination Questionnaire: A measure for Different Social Categories Students. *Journal of Psychosocial Research*, 12, 1, 81-88.
29. Trochim, W. M. (2006). *The Research Methods Knowledge Base*. En ligne. <http://www.socialresearchmethods.net/kb/>. Consulté le 27/10/2020.
30. Tsala Tsala, J. Ph. (2006). *La psychologie telle quelle perspective africaine*. Yaoundé : PUCAC.
31. Weiss, D. & Marmar, C.R. (1997). The Impact of Event Scale-Revised. In: J. Wilson & T.M. Keane TM, *Assessing psychological trauma and PTSD: A hand book for practitioners* (399-411). New York: Guilford press.
32. Zerach, G. & Solomon, Z. (2018). Gender differences in posttraumatic stress symptoms among former prisoners of wars' adult offspring. *Anxiety, Stress, & Coping*, 31, 21-31.

Mini-Questionnaire d'Inventaire des Stratégies Identitaires en Situation Transculturelle (QISIST)

Consigne : S'il vous plait, lisez chaque affirmation ci-dessous et dites à quel point elle est vraie pour vous. Veuillez indiquer en cochant le numéro de la réponse qui correspond le plus à votre avis. S'il vous plait soyez honnêtes. Vos réponses sont strictement confidentielles et ne seront utiles que si elles vous décrivent réellement

1= Pas du tout vrai ; 2= Un peu vrai ; 3= Modérément vrai ; 4= Assez vrai ; 5= Très vrai

N°	Items/composantes	Cochez votre meilleur choix				
		1	2	3	4	5
Camouflage/Clandestinité/Redéfinition de soi (QISIST₁: C/C/R)						
1	Je fais comme les gens d'ici juste pour qu'on ne me dérange pas dans mes activités ou à l'école ;	1	2	3	4	5
2	Quand je suis avec mes frères réfugiés/déplacés internes de chez nous je suis mieux, mais quand je mène mes activités je fais comme si j'étais d'ici	1	2	3	4	5
3	Quand je suis à l'école ou au travail, j'évite de parler et faire comme chez nous, ou pour le faire, je me cache d'abord	1	2	3	4	5
Arrangement/Affichage de soi (QISIST₂ : A/A)						
1	J'aime la façon et le style de vie des gens d'ici, et par tout ou je suis, je fais aussi comme eux	1	2	3	4	5
2	Même quand je suis avec mes frères réfugiés/déplacés internes de chez nous, je leur dis que je suis d'ici et fier de l'être	1	2	3	4	5
3	J'évite même d'être avec mes frères réfugiés/déplacés internes, car tout ce qu'on fait chez nous m'énerve, je préfère faire comme ici, et demeurer ici	1	2	3	4	5
Evitement/Réparation de soi (QISIST₃ : E/R)						
1	J'aime tellement ma culture qu'à l'école ou au travail, je ne reste qu'avec mes frères réfugiés/déplacés internes	1	2	3	4	5
2	A l'école ou au travail, j'esquive les gens d'ici en évitant tout lien/contact avec eux	1	2	3	4	5
3	Je cherche comment retourner chez nous pour faire comme chez nous étant à l'aise	1	2	3	4	5
Déni/Annulation de soi ou d'autrui (QISIST₄ : D/A)						
1	Si je reste trop ici, je sens que je dois finir par me suicider, car je refuse de faire comme les gens d'ici et je ne supporte plus d'être loin de chez nous	1	2	3	4	5
2	Tout ce qu'on fait ici m'énerve à tel point que quand je vois les gens d'ici, j'ai seulement envie qu'ils disparaissent tous	1	2	3	4	5
3	Je me soule/droge très souvent pour me sentir mieux et me comporter partout comme chez nous, sans avoir peur	1	2	3	4	5

Career Development and Performance of Non-Family Employees in Selected Family-Owned Businesses in Kenya: West Kenya Sugar and Kirathimo Cereals

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Abstract

Non-family employees in family organizations may face career development challenges. The study explores the impact of employee promotion, training, and assessment practices on the performance of non-family employees within family-owned organizations. The study applied a mixed-methods approach. The target population was from two family-owned businesses in Kenya, West Kenya Sugar, and Kirathimo Cereals. Using a cluster sampling approach, 106 participants took part in the study. The results indicated a positive and significant impact of employee training on employee performance ($\beta = 1.049$, $t = 8.245$, $p < .01$), as well as promotion on performance ($\beta = 0.813$, $t = 5.300$, $p < .01$). However, the impact of assessment practices on performance was insignificant ($\beta = 0.524$, $t = 2.756$, $p < .01$). The study concludes that employee training and promotion practices predict the performance of non-family employees in family-owned organizations in Kenya. Hence, organizations should invest in developing non-family employees to enhance both individual staff performance and organizational productivity.

Keywords: Performance, Career Development, Non-Family Employee, Family-Owned Organizations

Introduction

Background of the Study

The performance of employees in the family-owned organization is subject to factors beyond the conventional organization; featuring factors that are specific to the business model- such as the interaction among employees and family members (Yusof & Puteh, 2017). The variation in performance could emanate from a range of factors, including leadership behaviors, cultural dynamics, or access to career development (Agyapong, Ellis, & Domeher, 2016). The possible influence of career development practices on the performance of non-family employees is the focus of the current study.

Employee performance often relates to career development practices within the organization; where several elements that motivate, train, and propel employees influence the productivity of the employees in the workplace (Armstrong, 2011). Some of the components of career development include employee training, which provides learning either as individuals or in groups towards improving the productivity capabilities of the employees (Niles & Harris-Bowlsbey, 2002). Another component of career development is assessment practices, which acts as the basis for the assessment of training needs as well as consequent decisions related to the skills-job matching (Armstrong, 2011). Career development also features opportunities for additional responsibilities, including additional or new responsibilities at work or promotions to increase the value and performance of the employee (Conger, 2002).

The current study focused on evaluating the contribution of career development to the performance of individual employees in the organization. Career development, through training activities, improves employee skills and facilitates higher productivity (Conger, 2002). However, studies addressing differences in employee characteristics as determinants of career development access and their consequent performance are lacking. Such differences are likely to occur in contexts like the family organization (Omondi, 2017). Particularly, the family-owned business has often shown differences in recruiting and promoting employees based on their relationship, or lack thereof, to the owners. This could imply that if non-family employees lack sufficient access to promotion or other development opportunities, they could also report performance limitations. Consequently, exploring this phenomenon in the context of family businesses could elaborate on the possibility of a difference in performance due to unequal access to career development opportunities.

The target organizations for this study were West Kenya Sugar Company and Kirathimo Cereals Company. The former is located in the Western town of Kakamega, while the latter is headquartered in Nairobi with operations in Kitale and Nakuru.

Statement of the Problem

The performance of the employee often is influenced by practices in employee career development. While studies address general employee performance in the family-owned business, there are limited studies that relate the performance of the employees to their status as family members or otherwise (Njoroge, 2013; Afroz, 2018). Further, there have also been indications of the possibility that career development among non-family members in family-owned organizations is less than those targeting the family members (Brown, Lent, and Tehander (2012); Jehanzeb & Mohanty (2018); Maung, 2019). The difference may influence employee performance among non-family members.

The purpose of this study, therefore, was to evaluate the causes and potential differences in employee performance that may exist between the family and non-family employees in the family-owned businesses based on their access to career development. Succession planning in the family business differs significantly in its focus on family or non-family employees, with managerial interest focusing on family members. (Leon, 2014). Hence, potential differences may also exist in the career development practices and performance relating to these non-family employees. Evaluating these patterns of career development should reveal any link to employee performance.

Objectives of the Study

General Objective

The general objective of this study was to determine the influence of employee career development on the performance of non-family employees within selected family-owned businesses in Kenya.

Specific Objectives

The specific objectives of the study were:

- i. To determine training's influence on performance among non-family employees in the family-owned businesses in Kenya
- ii. To assess promotion effects on performance among non-family employees in the family-owned businesses in Kenya
- iii. To identify the impact of assessment practices on employee performance among non-family employees in selected family-owned businesses in Kenya.

Research Questions

- i. What is the impact of training on employee performance among non-family employees in the family-owned businesses in Kenya?
- ii. How does promotion in family-owned organizations in Kenya affect employee performance?

- iii. What is the impact of assessment practices on non-family employee performance in selected family-owned businesses in Kenya?

Literature Review

Introduction

The literature review for the study focuses on the theoretical framework, providing the theory of work adjustment as the anchoring theory of occupation and employee career development patterns, as well as the empirical literature review addressing the independent and dependent variables.

Theory of Work Adjustment

The theory of work adjustment, by Dawis and Lofquist (1984) has been postulated as perhaps one of the most carefully crafted theories of career choice and development (Patton & McMahon, 2006). The theory focuses on the provision of a model for the conceptualization of interactions between people and their environment of work. It founds from a psychological perspective that relates ability, satisfaction, reinforcement value, and the person-environment correspondence. The person-environment correspondence is the central premise of the theory, whereby the fit is determined by the degree to which the environment satisfies the needs of the person and the person satisfies the need of the environment (Brown & Lent, 2004).

Therefore, in the context of career development, the theory of work adjustment suggests that both the employee and the organization will adjust to meet the needs of each other. The organization strives to satisfy the needs of the employees through efforts such as achievement, advancement, activity, and social status; factors that act as reinforcers (Patton & McMahon, 2006). The individual derives satisfaction from the presence of these factors in the business; which the business provides through engagement in opportunities for development (Wright, McMahan, & McWilliams, 1994). At the same time, the environment benefits from satisfactoriness based on the actions of the individuals due to the full extent of the skills and abilities the employee provides (Boxall, Purcell, & Wright, 2007). Work skills and work needs are deliberately matched through the development process, ultimately providing a beneficial balance for the organization and the employees (Barney, 1991). As long as both parties are willing to continue making these adjustments, they can continue deriving mutual benefits in the long term.

Empirical Literature Review

Career Development in Family Businesses

The family business structure is defined as one where the firm is controlled by one or more families with their involvement being perceptible

in management and governance or the holding of capital stakes (Sharma, Chrisman, & Gersick, 2012). Lissoni *et al* (2011) reported that globally, the family-owned model comprises 80% of the companies of all sizes and that about 50% of the global GDP comes from entities with this business model. In Kenya, it is estimated that about 70%-80% of all businesses, both large companies, and SMEs, are family-owned (Omondi, 2017). Globally, family businesses employ more than 50% of the employed population and this percentage is even greater in Kenya, exceeding 80% (Njoroge, 2013). Differences in the management practices also produce different managerial structures, with managers of some of the family-owned firms being family members and others being non-family.

According to Miller (1996), employee career development is the provision of opportunities for employees to grow while improving performance within the organization. Human resource management, especially career development efforts, in the family-owned organization requires recognition of the special circumstances of work both for the family and non-family employees (Vani, Chandraiah, & Prakash, 2014). The indications are that opportunities for growth and career development increase individual employee performance and the consequent capacity to align their objectives with the organizational goals (Jehanzeb & Mohanty, 2018). The possibility of career advancement for the employee is seen as an influencer of their commitment to the organization as well as the potential for successfully contributing to improving organizational performance (Omondi, 2017).

Employee Training and Performance

Several studies have explored the relationship existing between employee training efforts within organizations and the performance of individual employees. According to Afroz (2018), employee training leads to an improvement in individual performance due to an increase in task engagement. Indications from the research are that employees are likely to improve their levels of satisfaction with the work following involvement in training programs. The outcome motivates positive performance in terms of the employee hours of productivity (Afroz, 2018). Therefore, Afroz (2018) reports a positive relationship as manifesting between employee training and patterns in employee performance. Mohamud (2014) reports similar findings with those of Afroz (2018), where employee training was found to provide the opportunity for the acquisition of new skills.

Al-Mzary, Al-Rifai, and Al-Momany (2015) also assessed the impacts of employee training on the performance of employees within organizations. From the study, indications are that employee training improves the skills of the employees, a finding similar to that of Mohamud (2014). According to Githinji (2014), employee training facilitates the achievement of improved

employee performance through the increase in enthusiasm in the performance of work. The study reported an increase in the individual output of employees after their involvement in specific training programs that founded on their required skill areas (Githinji, 2014). At the same time, the opportunities for employee training enabled the acquisition of employee confidence, which increased their participation in the innovative efforts of the organization (Githinji, 2014; Dysvik & Kuvaas, 2008). Consequently, the findings strongly support a positive relationship between employee training and performance. Elnaga and Imran (2013) support the position that employee training improves employee performance. The study reported that engagements in opportunities for training facilitate the closing of the gap between the required skill sets and the available skills within organizations. From the literature, there is a constant expression of the capacity of training to introduce new skills that would be otherwise lacking among the employees in the organization.

Assessment Practices and Employee Performance

Sauermann (2016) postulates the implementation of correct approaches and policies for performance management can improve the productivity of workers. The study details the value in objectivity, availability, and quality control as measures that ensure the effectiveness of employee assessment approaches in achieving employee performance (Sauermann, 2016). According to Ying-Ying (2012), however, employee assessment and performance management have a positive but insignificant relationship with the performance of employees. From the research, the indications are that proper approaches to performance management can improve employee performance. In Campbell (2008), the behavior of employees and low-level managers is dependent on the approaches to non-financial employee assessment and the incentives associated with this dimension of performance. The influence is mediated by the incentives that emanate from the outcomes of this non-financial performance assessment (Campbell, 2008).

According to van Herpen, van Praag, and Cools (2003), employee assessment influences the performance of employees owing to its improvement of employee motivation. The study indicated that the degree of positivity derived from the employee assessment system is dependent on its consistency and transparency relative to the organizational setup. Odhiambo (2015) argues that specific employee assessment practices increase the capacity for the acquisition of instrumental employee information towards the organization of strategies to improve their performance. At the same time, the employee assessment practices encourage employees that encounter the measurement and the associated outcomes.

Henri (2004) also assessed the relationship between employee assessment and the relationship with models of organizational effectiveness.

In the secondary study, the focus is on the identification of performance measurement relationships with multiple perspectives organizational effectiveness, including the changes in employee performance (Henri, 2004). From the study, indications are that employee assessment practices determine the reported levels of organizational effectiveness (Henri, 2004). However, the study fails to give particular attention to employee performance.

Promotion Opportunities and Performance

According to Saharuddin and Sulaiman (2016), promotion and compensation have a positive influence on the working productivity of employees. The positive effect is mediated by perceived levels of employee motivation as well as the levels of job satisfaction reported among the employees. Phelan and Lin (2001) explore the impact of various promotion systems on the performance of the organization. Systems such as merit-based promotion, up or out systems, and seniority-based systems are perceived as having a different impact on the performance of individual employees as well as the entire organization.

Mustapha and Zakaria (2013) also explored the effects of job promotion opportunities on the performance of employees; reflecting results akin to Saharuddin & Sulaiman (2016). According to the study, there is a significant and positive correlation between promotion opportunities at the workplace and the exhibition of job satisfaction among the employees. According to Abdulla, Djebarni, and Mellahi (2010), several factors come into play towards the determination of employee performance and job satisfaction; among them opportunities for promotion. The results of this study are similar to those in Mustapha & Zakaria (2013), especially on job satisfaction mediating the effect of promotion opportunities on performance. From the research, promotion opportunities had a positive correlation with job satisfaction and job performance, albeit lower than other factors like monetary incentives and policies.

Summary of Literature and Research Gaps

According to the reviewed literature, training, employee promotion, and assessment practices as components of career development have several impacts on performance. The research, however, often focuses on the performance of the entire organization as opposed to individual employees. Besides, the literature mostly addresses employee assessment instead of assessment practices. At the same time, there is an existing gap where none of the studies assess the relationship between the practices in career development and the performance of individual employees within the family-owned organization or among non-family employees. The two study shortcomings, therefore, form the basis for the current study.

Research Methodology

Research Design

This study applied descriptive research design. This facilitated the acquisition of data necessary for the generalization of findings to a larger population. This design enabled addressing of the “what” element of this study, specifically in the perspective of identification of the effect. The independent variable (career development) was measured in the study by the constructs of –employee training, assessment practices, and promotion opportunities – and how these variables influence performance. The measurement of the dependent variable was based on internal indicators of individual performance such as reducing the number of errors and the time spent on productive work within the organizations that participated in the study.

Target Population and Sampling

The target population for this study was the two companies included in the research. These companies were West Kenya Sugar and Kirathimo Cereals Co. The selection of these companies was based on both size and age. The former was established in 1940 and comprises about 2700 employees. However, only 754 employees were available for the research on account of the COVID-19 pandemic and consequent lay-off of some auxiliary staff. On the other hand, Kirathimo Cereals is a first-generation entity established in the year 2000. Its total employee base is about 300. Therefore, the target population for the study was the two organizations. This study applied the cluster sampling technique. This study applied clusters featuring the several organizations that depict this family-owned model. Therefore, potential respondents were identified among employees in various family-owned organizations of different products and sizes. The researcher then applied random sampling to select the sample size from the populations. The researcher selected participants among both family and non-family members that were part of these organizations for a fully representative sample.

Table 3-1. Population and Sample Size

Organization	Employee Population	Sample Size (10%)
West Sugar Kenya	754	76
Kirathimo Cereals	300	30
Total	1054	106

The organizations had an estimated total of 754 employees combined. Consequently, a sample size of 106 respondents was considered sufficiently representative for the completion of the study; being 10% of the target population (Mugenda and Mugenda, 2003). Nevertheless, there was an effort to ensure the number of respondents per organization matched the population.

This meant the distribution of respondents where a tenth of the respondents was from Kirathimo Cereals, akin to the percentage of the population from this company. The remaining participants were from West Kenya Sugar, representing the larger population for the research.

Data Collection Instruments and Procedure

In this study, data was collected through the questionnaire; developed based on the specific study objectives. For this study, the questionnaire comprised of closed-ended questions taking the form of a five-point Likert scale. It also contained an open-ended question, allowing for the assessment of the emotional components or opinions of the participants.

The researcher began by seeking permission for the collection of data both from the institution and the target organizations. Emails comprised the initial communication to seek participant consent. The researcher then conducted a pilot test on ten of the prospective respondents, allowing the consequent testing for the questionnaire's reliability and validity. The questionnaires were distributed physically by the researcher. The final collection of the filled-in questionnaires was after six weeks.

Data Analysis Methods

The process involved the coding of the data and inputting it into the Statistical Package for Social Sciences (SPSS) for analysis. The study applied Pearson Correlation analysis, and simple linear regression to determine how the dependent variable (the performance of non-family employees) is influenced by the independent variables (employee training, assessment practices, and promotion).

Ethical Considerations

The confidentiality of the participants was among the issues that the researcher considered in the research process. To address this component, the researcher ensured the respondents did not provide any of their details within the questionnaire. At the same time, the researcher sought informed consent of participants in the research. Therefore, the researcher assured the participants through the questionnaire that their participation was voluntary. The questionnaire also contained information on the nature and purpose of the research. To ensure the security of the data, the researcher made sure to store the complete questionnaires in a lockable safe. This safe was only accessible by the researcher.

Research Findings

Response Rate

The researcher distributed 106 questionnaires to employees within the two target organizations, West Kenya Sugar and Kirathimo Cereals. 106 questionnaires were returned. All of them had all the quantitative and qualitative areas addressed. This translated to a 100% completion rate. This made the responses received adequate to support this data analysis.

Table 4-1. Response Rate

Questionnaire	Number	Percentage
Complete Questionnaires	106	100
Incomplete Questionnaires	0	0
Total	106	100

Source: Survey Data, 2020

Respondent Demographics

In this section, details on the respondents' demographic characteristics are provided. This involves two aspects, their gender and their place as family members or non-family employees.

Gender

The study respondents were required to indicate their gender. The results show that the majority were male, with 61 (57%) being male participants, and 45 (43%) female participants as shown in Figure 4.1. This differential was expected, especially as there is a slightly higher number of male employees in both organizations than the female employees.

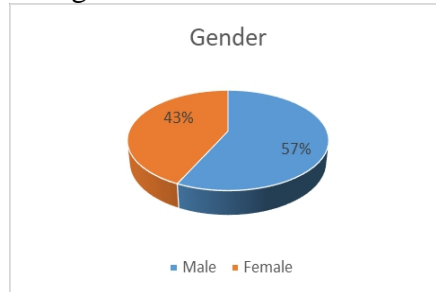


Figure 4-1. Gender Distribution

Source: Survey Data, 2020

Employee Status

The respondents were also required to mark their employee status. This was expected to be between family employees and non-family employees. Twenty-nine employees were family members of the organizations' owners, while 77 respondents were non-family employees. As Figure 4.2 shows, this translated to 28% and 72% of the participants.

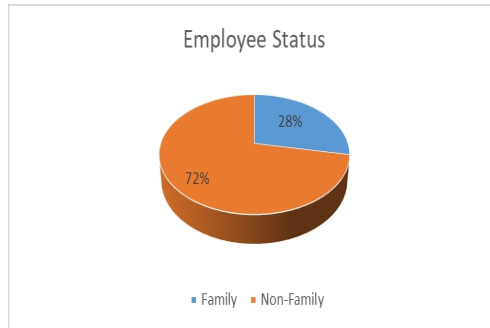


Figure 4-2. Employee Status
 Source: Survey Data, 2020

Descriptive Statistics

Table 4-5. Performance Descriptive Statistics

	N	Me an	SD
I have reduced the number of errors I make in my work	106	3.47	4.027
I have reduced the amount of time I take in completing individual tasks	106	3.12	1.093
I have reduced the number of days I spend away from work	106	2.91	1.199
I have reduced the number of hours I spend away from my workstation	106	3.02	1.211
Valid N	106		

Source: Survey Data, 2020

The performance had a vast SD of 4.027, pointing to largely spread-out data. This aspect affirmed variations in individual performance among employees based on characteristics. The other aspects of performance had relatively clustered about the mean data. However, the perceived performance indicators were lower, but with means of 3.12 and 3.02 pointing to positive performance improvements.

Correlation Analysis

The research applied Pearson’s Moment correlation at the 0.01 level of significance to evaluate the correlation between various independent variables and the dependent variable.

Table 4-6. Correlation Analysis

		Performance1	Training1	PerformAsse	Promotion
Performance 1	Pearson Correlation	1			
	Sig.(2-tailed)		.000	.007	.000
	N	106	106	106	106
Training1	Pearson Correlation	.629**	1		
	Sig. (2-tailed)	.000		.008	.000
	N	106	106	106	106
PerformAsse	Pearson Correlation	.261**	.256**	1	
	Sig. (2-tailed)	.007	.008		.001
	N	106	106	106	106
Promotion	Pearson Correlation	.461**	.478**	.322**	1
	Sig. (2-tailed)	.000	.000	.001	
	N	106	106	106	106
**. Correlation is significant at the 0.01 level (2-tailed). Data from Survey, 2020.					

According to the results in Table 4.6, training exhibits a strong, positive, and significant relationship with performance within these family-owned organizations ($r = 0.629$, $p < .01$). Similarly, assessment practices showed a positive and significant correlation with the performance of employees within this organization ($r = 0.261$, $p < .01$). Similar results were also observed in the evaluation of the correlation between the promotion efforts and opportunities and employee performance ($r = 0.461$, $p < .01$). However, the data pointed to the correlation between performance and assessment, as well as between performance and promotion, to be weaker than that observed between the dependent variable and training.

Regression Analysis
Training and Employee Performance
Model Summary between Training and Performance

Table 4-7. Model Summary between Training and Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.629 ^a	.395	.389	1.09184
a. Predictors: (Constant), Training1				

Table 4.7 shows the linear regression model summary between training and employee performance among staff at the two organizations. The findings show that training, as a variable, explains about 39.5% variability in employee performance within the organizations.

Regression ANOVA between Training and Performance

Table 4-8. Regression ANOVA Training and Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.048	1	81.048	67.987	.000 ^b
	Residual	123.980	104	1.192		
	Total	205.029	105			
a. Dependent Variable: Performance1						
b. Predictors: (Constant), Training1						

Table 4.8 evaluates the existence of a linear relationship between training and performance. ANOVA scores below 0.050 depict a significant influence of the independent variable on the dependent and the goodness of fit of the model. Results lower than the alpha show a relationship between the variables. From the analysis of variance, there is a statistically significant linear relationship between training and performance, ($F= 67.98, p<0.01$).

Regression Coefficients between Training and Performance

Table 4-9. Regression Coefficients of Training and Performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.019	.396		-.048	.962
	Training1	1.049	.127	.629	8.245	.000
a. Dependent Variable: Performance1						

According to Table 4.9, training impacts significantly on performance among employees in family-owned organizations. Particularly, changes in one unit of training will elicit a 1.049 change in the performance of the employees ($\beta = 1.049, t = 8.245, p<.01$).

Assessment Practices and Employee Performance

Model Summary of Assessment Practices and Employee Performance

Table 4-10. Model Summary of Assessment Practices and Employee Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.261 ^a	.068	.059	1.35544
a. Predictors: (Constant), PerformAsse				

The table reflects the perceived summary of the linear regression model between assessment practices and employee performance. According to Table 4.10, assessment practices as a variable explains about 6.8% of the variability that manifests in performance ($R^2=0.068$).

Regression ANOVA between Assessment and Employee Performance

Table 4-11. ANOVA between Assessment Practices and Employee Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.959	1	13.959	7.598	.007 ^b
	Residual	191.070	104	1.837		
	Total	205.029	105			
a. Dependent Variable: Performance1						
b. Predictors: (Constant), PerformAsse						

The ANOVA table evaluates the existence of a linear relationship between assessment and employee performance within these entities and the model's goodness of fit. Table 4.11 indicates the existence of a positive linear relationship between assessment and performance ($F = 7.598, p < .01$).

Regression Coefficients between Assessment and Employee Performance

Table 4-12. Coefficients between Assessment and Employee Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.514	.601		2.519	.013
	PerformAsse	.524	.190	.261	2.756	.007
a. Dependent Variable: Performance1						

The research also implemented a regression coefficient analysis to assess the level of influence that assessment practices exert over performance. From the evaluation, the study showed that, within the family-owned businesses, assessment practices positively influence employee performance. However, at the 99% level of significance, this relationship is insignificant ($\beta = 0.524, t = 2.756, p < .01$).

Promotion and Employee Performance

Model Summary of Promotion and Employee Performance

Table 4-13. Model Summary of Promotion and Employee Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.461 ^a	.213	.205	1.24588
a. Predictors: (Constant), Promotion				

The table reflects the perceived summary of the linear regression model between promotion and employee performance. According to Table 4.13, assessment as a variable explains about 21.3% of the variability that manifests in performance ($R^2=0.213$).

Regression ANOVA between Promotion and Performance

Table 4-14. ANOVA between Promotion and Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	43.598	1	43.598	28.088	.000 ^b
	Residual	161.430	104	1.552		
	Total	205.029	105			
a. Dependent Variable: Performance1						
b. Predictors: (Constant), Promotion						

The ANOVA table evaluates the existence of a linear relationship between promotion and employee performance within these entities and shows the model's goodness of fit. Table 4.14 indicates the existence of a significant and positive linear relationship between promotion and performance ($F = 28.088, p < .01$).

Regression Coefficients between Promotion and Performance

Table 4-15. Coefficients between Promotion and Performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.607	.491		1.235	.219
	Promotion	.813	.153	.461	5.300	.000
a. Dependent Variable: Performance1						

According to Table 4.15, promotion impacts significantly on performance among employees in family-owned organizations. Particularly, changes in one unit of promotion will elicit a 0.813 change in the performance of the employees ($\beta = 0.813, t = 5.300, p < .01$).

Qualitative Analysis

Table 4-16. List of Codes and Themes from Qualitative Question (Further comments on career development and performance within the organizations)

Themes	Codes	Excerpts
Family/ non-family employee distinctions in promotion and training	Family employee prioritization for promotion and training	“The boss’ children are first when promotions come up”
		“It has been great, working here, I have had so many opportunities to interact with clients and attend conferences...I feel ready for more” (Family member-translation)
	Non-family employee exclusion in promotion	“If you are not in the family, you will never sit behind the desk (Translated)”
Low performance	No work more than necessary	There is no need to try too hard, as long as you’re getting paid
	Negative attitudes towards commitment to role and performance	“Why should I work so hard and I am not the boss’s child? Only they will be the manager, not me” (Translated)
	Short-term focus on work	You can get fired any time. Just take advantage of any raises or training that come up

Despite the qualitative question offering an open platform, most of the responses pointed to an underlying disenfranchisement with the approaches to career development that target non-family members. The participants pointed to a pervasive distinction between family and non-family members, especially in decisions surrounding promotions. Specifically, the respondents reiterated that “If you are not in the family, you will never sit behind the desk” or “You can only be promoted up to supervisor, not the manager” within their comments. This was despite responses showing that most of them had received some salary increments and changes in position over the recent years. As such, while there was some consensus that the development opportunities regularly manifest, the staff felt that the chances and the benefits were more readily available to family members than the non-family employees.

On the other hand, the employees pointed to behavioral factors and attitudes that could mediate performance, regardless of exposure to development practices and opportunities. The respondents exhibited negative

inclinations towards committing to efforts intended to demonstrate positive performance. This was particularly related to the perception that they could not progress very far within the entities, especially because senior management roles are reserved for the family members. Therefore, even as employee performance varies subject to their development, some contextual factors could reduce the responsiveness of this group of employees to the efforts. These perspectives suggested that, even as development influences performance among all employees, the effects are less pronounced for non-family members of these family-owned organizations.

Discussion

The study showed that employee training influences performance significantly ($\beta = 1.049$, $t = 8.245$, $p < .01$). This outcome emanates from indications among the staff that exposure to training opportunities had diminished their rates of work errors and increased their commitment to internal productivity. The performance outcomes also included the number of hours spent away from work or workstation. Indications from the previous literature have supported these findings. According to Githinji (2014), employee training increases enthusiasm in the job, leading to positive performance increases and reductions in resource wastage. Besides, employee individual performance increases proportionately to training in Afroz (2018) following the acquisition of skills and consequent error reduction. As such, the outcomes of this research reflected common patterns of interactions between training and performance, exhibiting no conspicuous deviations. Hence, the focus on providing training to non-family employees within the organization underlies the performance changes they exhibit.

The findings also showed a significant relationship between promotion practices and employee performance in the organization. Notably, several employees have had promotion opportunities, even though not overwhelmingly. Regardless, the access to promotion opportunities exerts a positive and significant impact ($\beta = 0.813$, $t = 5.300$, $p < .01$) on employee performance within this organization. The perspective suggests that most employees with positive performance trends expect or have had a promotion within the organization. This acts as a source of motivation or commitment to the organization. The view in the previous literature is that job satisfaction is a mediating variable in the relationship between promotion and performance. Satisfaction emanating from either the access to these promotions or the awareness of a chance for advancement perpetuates a positive response by employees, manifesting through increased productivity or performance outputs (Abdulla et al., 2011; Mustapha & Zakaria, 2013). Hence, availing promotion opportunities to the staff within these organizations has been instrumental in determining their performance direction.

Further, the research findings also showed a positive relationship between participation in assessment practices and performance. However, this relationship was insignificant at 99% confidence level ($\beta = 0.524$, $t = 2.756$, $p < .01$). The perspectives suggest that, while employee assessment practices are important, they are insignificant to eliciting changes in the performance outcomes. The indicators surrounding the variables included participating in self and peer assessment, as well as discussions on assessment practices feedback. These findings contribute to the seeming uncertainty in the literature regarding the impact of assessment practices on performance. Some studies have established that the variable predicts performance outcomes, including acting as a source of encouragement and creating transparency (van Herpen et al., 2003; Odhiambo, 2015). However, there are also indications that this practice has insignificant impacts on employee performance (Ying-ying, 2012). Perhaps further research in this area could highlight the mediating features that determine the significance of the variable in determining performance outcomes.

The theory of work adjustment by Dawis and Lofquist (1984) points out the importance of organizational-employee fit. In the theory, the fit is determined by the degree to which the environment satisfies the needs of the person and the person satisfies the need of the environment. This perspective suggests that employees make adjustments to reflect the outcomes of interventions by the organization targeting their improvement (Brown & Lent, 2004; Patton & McMahon, 2006). As such, the outcomes of this research accentuate deliberate adjustments by employees in response to organizational commitments, such as employee training and promotion opportunities. Performance improvements exemplify the person's satisfaction with organizational needs.

A notable aspect that emerged in the qualitative component of the study is the differentiated approach to promotion, training, and assessment that surrounds family and non-family members. The results showed that non-family employees are often less inclined to make an effort towards performance improvements because of perceptions of their low consideration for training opportunities relative to family staff. The themes emerging from this analytic aspect affirm a long-standing notion that employees in family firms face limitations regarding the highest levels of advancement they can accomplish if they are not family members (Njoroge, 2013; Vani et al., 2014; Omondi, 2017). Besides, the investment in training family members also seems to support this sentiment, with the long-term focus only manifesting in the family employees. However, family employees expressed sentiments to the contrary, appreciating opportunities for training and access to promotion opportunities.

As such, the results showed distinct inclinations towards the positive performance changes of employees following an engagement in training and promotion efforts. The relationship suggested that investments in advancing or educating staff will increase their productivity efforts within the firm. Distinctions within the qualitative data suggested that family members also experience favorable conditions surrounding both promotion and training. These inclinations highlight a differential in the performance of the staff, supported by the quantitative evidence indicating the correlations between performance and these variables. Consequently, the differences in commitment to training and promotion by the organization targeting non-family employees may result in performance limitations within this group of staff.

Conclusion

Based on the study findings, several conclusions emerge from the current research. Training was found to have a significant influence on the performance of individual employees. Based on these findings, it can be concluded that when organizations put in place mechanisms and budget for employee training it likely to contribute significantly to the performance of those employees leading to improved organization performance. Promotion was also found to have a positive and significant impact on employee performance. Based on the findings, it can be concluded that when organizations set systems for promotion, employee performance will increase significantly. The research conclusion is that assessment practices do not necessarily influence the performance of non-family employees and organizations may not have to vary them in pursuit of these employee performance improvements. Based on the findings, it can be recommended that the family-owned businesses should establish promotion systems and set aside budgets to train both family-related and not family-related employees.

Recommendations for Practice

The primary recommendation is that family-owned organizations in Kenya should actively invest in employee training targeting non-family employees. The data supports the view that advances in employee training should enhance performance outcomes.

It is also recommended that the family-owned organizations in Kenya pursue strategies for promoting non-family employees. The focus will play a crucial role in sustaining positive performance within the family-owned organizations in Kenya.

Suggestions for Further Research

Based on the outcomes of the current study, it is recommended that future research engages in a more targeted pursuit of family-owned organization practices in career development and their effect on performance. Future research should employ more organizations in the Kenyan context, allowing the evaluation of the impact of developmental efforts on performance as well as the comparison between companies based on their practices. A larger sample would provide a framework for evaluating and comparing companies with a higher number of non-family employees reporting developmental efforts against those without such investments, and the resulting performance patterns.

References:

1. Abdulla, J., Djebarni, R., & Mellahi, K. (2011). Determinants of job satisfaction in the UAE: A case study of the Dubai police. *Personnel Review*, 40(1), 126-146.
2. Afroz, N. N. (2018). Effects of Training on Employee Performance - A Study on Banking Sector, Tangail Bangladesh. *Global Journal of Economics and Business*, 4(1), 111 - 124.
3. Agyapong, A., Ellis, F., & Domeher, D. (2016). Competitive strategy and performance of family businesses: moderating effect of managerial and innovative capabilities. *Journal of Small Business & Entrepreneurship*, 28(6), 449-477.
4. Al-Mzary, M. M., Al-rifai, A., & Al-Momany, M. O. (2015). Training and its Impact on the Performance of Employees at Jordanian Universities from the Perspective of Employees: The Case of Yarmouk University. *Journal of Education and Practice*, 6(32), 128-41.
5. Armstrong, M. (2011). *Armstrong's Handbook of Strategic Human Resource Management*. Kogan Page Publishers.
6. Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.
7. Boxall, P. F., Purcell, J., & Wright, P. M. (2007). *The Oxford handbook of human resource management*. Oxford: Oxford Handbooks.
8. Brown, S. D., & Lent, R. W. (2004). *Career development and counseling: Putting theory and research to work*. New York: John Wiley & Sons.
9. Brown, S., Lent, R., Telander, K., & Tramayne, S. (2012). Social cognitive career theory, conscientiousness, and work performance: A meta-analytic path analysis. *Journal of Vocational Behavior*, 79(1), 81-90.

10. Campbell, D. (2008). Nonfinancial Performance Measures and Promotion-Based Incentives. *Journal of Accounting Research*, 46(2), 297-326.
11. Conger, S. (2002). Fostering a career development culture: Reflections on the roles of managers, employees, and supervisors. *Career Development International*, 7(6), 371-375.
12. Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment: An individual-differences model and its applications*. University of Minnesota Press.
13. Dysvik, A., & Kuvaas, B. (2008). The relationship between perceived training opportunities, work motivation, and employee outcomes. *International Journal of Training and Development*, 12(3), 138-158.
14. Elnaga, A., & Imran, A. (2013). The Effect of Training on Employee Performance. *European Journal of Business and Management*, 5(4), 136-47.
15. Githinji, A. (2014). Effects of training on employee performance: a case study of United Nations Support Office for the African Union Mission in Somalia. Doctoral dissertation: United States International University-Africa.
16. Henri, J. (2004). Performance measurement and organizational effectiveness: Bridging the gap. *Managerial Finance*, 30(6), 93-123.
17. Jehanzeb, K., & Mohanty, J. (2018). Impact of employee development on job satisfaction and organizational commitment: Person-organization fit as moderator. *International Journal of Training and Development*, 22(3), 171-191.
18. Leon, T. M. (2014). Factors Hindering Family Business Succession Planning in Kenya: The Case of Clearing and Forwarding Business in Nairobi County, Nairobi Town. Doctoral dissertation: United States International University-Africa.
19. Lissoni, J., Pereira, M., Almeida, M., & Serra, F. (2011). Family Business: how family and ownership shapes business professionalization. *Review of Business Management*, 12(37), 464-479.
20. Maung, K. M. (2019). Is Career Development Essential for Job Satisfaction and Employee Retention? The 6th International Postgraduate Student Colloquium (pp. 30-42). IPSC.
21. Mohamud, A. (2014). The effect of training on employee performance in Public Sector Organization in Kenya: The case of NHIF Machakos Country. University of Nairobi: Master Thesis.
22. Mugenda, O. M. & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative Approaches*. Nairobi: African Centre for Technology Studies

23. Mustapha, N., & Zakaria, Z. C. (2013). The Effect of Promotion Opportunity in Influencing Job Satisfaction among Academics in Higher Public Institutions in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 3(3), 20-27.
24. Niles, S. G., & Harris-Bowlsbey, J. (2002). *Career development interventions in the 21st century*. Upper Saddle River, NJ: Merrill Prentice Hall.
25. Njoroge, C. N. (2013). The effects of family-owned business on employee advancement: A case study of Nakumatt Holdings Limited. *International Journal of Business and Commerce*, 4(6), 1-44.
26. Odhiambo, E. (2015). *The Effect of Performance Management Practices on Employee Productivity A Case Study of Schindler Limited*. United States International University-Africa: Doctoral dissertation.
27. Omondi, D. (2017). Success and succession: Five characteristics of a good family business. Retrieved October 25, 2018, from <https://www.standardmedia.co.ke/article/2001255095/success-and-succession-five-characteristics-of-a-good-family-business>
28. Patton, W., & McMahon, M. (2006). *Career Development and Systems Theory: Connecting Theory and Practice*. New York: Sense Publishers.
29. Phelan, S., & Lin, Z. (2001). Promotion systems and organizational performance: A contingency model. *Computational & Mathematical Organization Theory*, 7(3), 207-232.
30. Saharuddin, & Sulaiman. (2016). The Effect Of Promotion And Compensation Toward Working Productivity Through Job Satisfaction And Working Motivation Of Employees In The Department Of Water And Mineral Resources Energy North Aceh District. *International Journal of Business and Management Invention*, 5(6).
31. Sauermaann, J. (2016). *Performance measures and worker productivity*. Sweden: Stockholm University.
32. Sharma, P., Chrisman, J., & Gersick, K. (2012). 25 years of family business review: reflections on the past and perspectives for the future. *The Family Business Review*, 25(1), 5-15.
33. van Herpen, M., van Praag, C. M., & Cools, K. (2003). *The Effects of Performance Measurement and Compensation on Motivation*. Amsterdam and Rotterdam: Tinbergen Institute.
34. Vani, R., Chandraiah, M., & Prakash, C. (2014). Family Business Management in Small and Medium Enterprises at Nellore District. *International Journal of scientific research and management (IJSRM)*, 2(8), 1249-1266.

35. Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: a resource-based perspective. *International journal of human resource management*, 5(2), 301-326.
36. Ying-ying, Z. (2012). *The Impact of Performance Management System on Employee performance*. Master Thesis.
37. Yusof, S. A., & Puteh, F. (2017). Favoritism and Job Performance in Family-Owned Business: Effect of Leadership Style. *International Social Sciences Academic Conference (ISSAC)* (pp. 18-43). ISSAC.



Social Representations Of Diseases Linked To Climate Change In The Population Of A Slum District: A Case Study From Haiti

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Abstract

Faced with the threats posed by climate change to global public health in the 21st century, the island of Haiti has a duty to inform the population and disseminate knowledge on the health consequences of the phenomenon. The effects of climate change are imminent for the country. In terms of health, the consequences will particularly accentuate the prevalence of endemic diseases, water-borne and infectious pathologies, malnutrition and undernourishment. Also, information on this issue must be widely disseminated through environmental and health education in order to raise awareness in the population and encourage them to modify their daily lifestyles through mitigation and adaptation. Previous work on strategies for popularizing scientific knowledge has shown that culture and poverty constitute obstacles to changes in behavior favoring mitigation and adaptation to climate change. The study of the Social Representations of the populations or social groups concerned makes it possible to discarded them.. From this point of view, this article questions and analyzes the social representations of vector pathologies including Malaria, Dengue, Chikungunya and Zika among the residents of Jalousie, one of the vulnerable neighborhoods of the Metropolitan Region of Port-au-Prince (MRPP - Haiti). This work highlights the link established by the population of Jalousie between climate change and the transmission of the vector-borne diseases mentioned. It does this by considering elements of Haitian popular knowledge likely to build understanding that combines the prevention and symptomatology of these pathologies with knowledge of public hygiene and supernatural phenomena. The survey carried out on a representative sample of 121 residents of the Jalousie district, a slum area of MRPP, shows that vector-borne diseases are assimilated with epidemics and their transmission due to changes in the seasons (temperature change: hot weather, rainy weather in Haiti).

Keywords: Social Representations, Climate Change, Vector-Borne Diseases, Slums, Haiti

Introduction

Since the start of the industrial revolution around 1750, human activities have caused an unprecedented increase in the concentrations of greenhouse gases (GHGs) in the atmosphere (IPCC, 2001; IPCC, 2007). These emissions generate environmental hazards which have, among other things, serious consequences on the social determinants of the health of living beings. This is what the IPCC (2014) confirmed in its report concluding that "human influence is clearly established regarding the warming of the atmosphere, the oceans, rising sea levels, certain changes in the water cycle and regarding the occurrence of extreme weather events. It should be noted that the consequences of past and current GHG emissions will inevitably be felt until 2050, even if all GHG emissions cease now." In terms of health, the negative effects of climate change on the human population are estimated in excess of 250,000 potential deaths per year between 2030 and 2050 at the global level (Hales et al, 2014). These effects linked to heat waves result in mortality in people over 65, mortalities associated with coastal flooding, diarrheal diseases in children under 15, malaria, dengue and malnutrition (Hales et al, 2014; Bard, 2017).

In the least developed countries, corollary factors including those linked to socioeconomic vulnerability will worsen the rate of mortality and morbidity due to infectious pathologies (McMichael et al, 2003). The Republic of Haiti, a fragile area suffering from vulnerability to climate change, like all the other territories constituting the insular geography of the Caribbean, is also likely to see an increase in the prevalence of endemic infectious diseases, including those with vector transmission. Between 2014 and 2016, Haiti experienced episodes of chikungunya and zika epidemics while malaria remains persistent with a high probability of increasing its prevalence (IHE, 2018). The country is slow to demonstrate its capacity to adapt and mitigate climate change. Its population, uninformed is trying to adapt independently but without great results. (Singh et. Cohen, 2014).

In such circumstances, in line with public health approach taken, priority is given to health education through environmental education to encourage habits favorable to the adoption of behaviors conducive to mitigation and adaptation to the effects of climate change on populations. The process involved in changing behaviors may turn out to be more or less long depending on the interests of the person or the target population, especially since climate change generates anxiety in populations as it affects the socioeconomic situation of their daily lives (Pruneau et al., 2008). Thus, we agree with the idea of studying the social representations of populations, judged by Jodelet (1984) as ultimately providing understanding of collective thought, essential to any program intended to popularize science in the social and educational domains (McDaniels et al., 1996).

In this perspective, this study questions and analyzes the social representations of the residents of a vulnerable neighborhood by considering elements of Haitian popular knowledge in order to ascertain their understanding of the prevention and symptoms of malaria, dengue, chikungunya and zika with regard to climate change.

Socio-sanitary characteristics of the slums of the Metropolitan Zone of Port-au-Prince

The process of creating slums in Haiti brings to mind the concept of metropolization in the context of poverty in the countries of the Global South (Darbouze et al., 2018). It manifests itself as a form of accentuated socio-spatial differentiation and generalized informality. It comprises informal and disorganized urban development, escaping state control due to a centralizing national policy (Verret et al., 2017). This absence of the state favors the proliferation of substitute actors including local associations and international NGOs which provide the few basic social services that exist. At the same time, there is a strong trend towards the provision of informal services. Consequently, the services have to be paid for at a high price and their quality leaves much to be desired, especially for the supply of water (Bras et al., 2017) with the subsequent risk to the health of the population.

Due to the lack of a good sanitation system, garbage litters the streets and alleys between houses. Rain presents a good opportunity for disposing household waste and other pollutants, favoring the development of diseases and the proliferation of mosquitoes, vectors of transmissible diseases including those of interest to our study (Bras, 2010).

Until recently, Port-au-Prince, the capital of Haiti, had positioned itself as an attractive area for populations living in the regions for socio-economic reasons stemming from the centralized national policy of the State (Milian and Konshina, 2017). Indeed, its growth has occurred through aggregation since the 1930s (Milian and Konshina, 2017). Its population increased from 9,949,322 inhabitants in 2000 to 11,123,176 in 2018 (World Perspectives, 2020). 17% of this population is concentrated in marginalized areas and precarious neighborhoods (Olivier (2018)

At the same time, Milian and Konshina (2017) reported other processes that would lead to a redistribution of the population of the metropolitan area. They referred to the fact that “the hydro-climatic disasters (cyclones of 2004 and 2008), the earthquake of 2010 as well as the political unrest of the period 2002-2004 led some inhabitants of Port-au-Prince to leave the region. city-center to settle in the "periphery". Although this occurred on a small scale, it reveals a new surge in urbanization on all fronts. From this point of view, the latest events endangering security (lawlessness, kidnapping)

leading the populations of certain slums to take refuge in other peripheral areas should also be considered.

In terms of health, the results taken as national averages are mixed. Pilkington (2017) mentioned a few cases but the results are not indicative of the overall quality of care (Table 1).

Table 1. Health service provision in the metropolitan area of Port-au-Prince (MAPP) - (Pilkington, 2017)

	MAPP	Haiti
Infant mortality	81/1000	59/1000
Malnourished children	1.8/100	0.9/100
Physical violence against women	29.2/100	28.2/00
Women giving birth in a hospital setting	60/100	38.1/100

These data indicate that the concentration of most health care infrastructure does not reflect the availability of services in the metropolitan area of Port-au-Prince (30% of hospitals and 12% of health centers). The figures show this very clearly because according to data from 2014 (Pilkington, 2017), 52% of health facilities in Haiti provide a set of basic health services while only 35% of health facilities do so in the metropolitan area.

Methodology

Brief presentation of the study area

This article analyzes the social representations of vector-borne diseases in a context of climate change in the population of the Jalousie district, a slum area in the metropolitan region of the capital of Haiti. Figures 1 and 2 show the orthophotoplane and the administrative boundaries of Jalousie. This site was chosen because it presents the five (5) related phenomena characterizing the habitat of the slums of Haiti: “(i) an accentuated urban sprawl, (ii) an accelerated process of slum development on the periphery, (iii) the rapid densification and degradation of central neighborhoods, (iv) significant vulnerability to environmental risks, and (v) a significant quantitative and qualitative housing deficit caused by, among other things, unprecedented demographic pressure” (Lizarralde et al. , 2018).

From the 1980s, the area was subject to successive waves of people fleeing Port-au-Prince due to political unrest but also due to arrivals of internal migration, characterized by the massive influx of people from rural areas to the outskirts of Port-au-Prince (Corvington, 2007). From there began a series of anarchic constructions on deedless occupied land and on state property. Demographic data for Jalousie are almost nonexistent. However, some authors report that in less than 15 years, the population has increased from 22,000 to 50,000 inhabitants (estimated in 2015 by Gilles et al., 2015).



Figure 1. Orthophotoplan of the Jalousie slum area

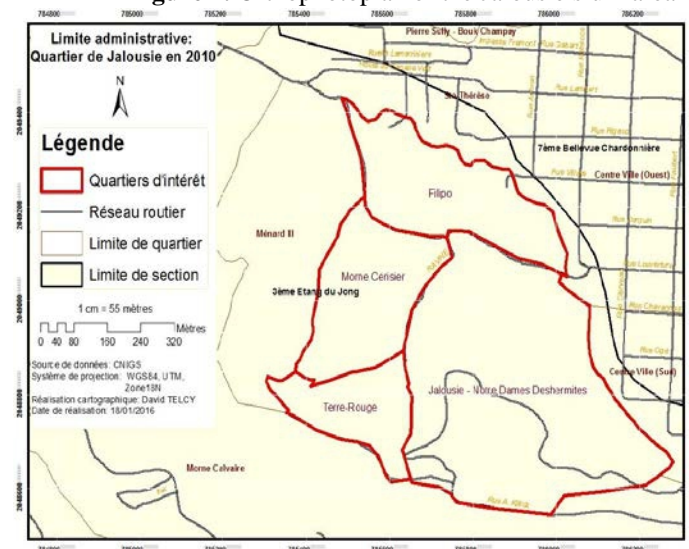


Figure 2. Administrative boundaries of the Jalousie slum area

The habitats of Jalousie correspond to the characteristics of those of the metropolitan area of Port-au-Prince. Indeed, the neighborhood is home to a community in distress, struggling with a lack of sanitation and an adequate drinking water supply system. Makeshift houses mingle with large concrete structures of dubious safety, accessible only by narrow stairs, erected on the side of Morne l'Hôpital on steep slopes or in ravines serving as canals for runoff water. The area is highly exposed to environmental risks due to poor plant cover, causing humans, cattle and houses to wash away mud. In addition, a secondary fault crosses part of the slum; there is a hazard and very strong ground movement (Global Development 2018).

The population survey

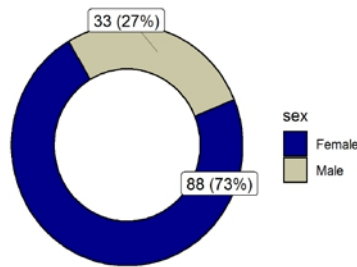
The qualitative, exploratory and descriptive type study analysed two phenomena: the Social representations of people residing in the neighbourhood and vector-borne diseases requiring notification and/or surveillance (MSPP, 2013) including malaria, chikungunya, zika and the dengue. The survey scrupulously responded to the scientific criteria of Moscovici's representation methods (1954) by relying on the association approach of Abric (2001) and the evocation approach of Vergès (2001). The questionnaire, assembled according to these two approaches, comprises five (5) parts: i) Socio-demographic characteristics; ii) General knowledge of climate change; iii) Perceptions of diseases linked to climate change; iv) Community actions for adaptation to climate change; v) Personal actions to protect the environment and prevent vector-borne diseases. The composition of the representational field of the latter was studied according to the age, gender and academic level of the respondents. Bi-variate crosses were made in order to identify for scientific exploration any evolutionary trend of the object of representations relative to the independent variables. However, our analyses were not performed to test their independence because they did not function on the basis of research hypotheses. In fact, their strength of association has not been measured.

The sample was chosen randomly according to a weighting per block, corresponding to the geographical distribution adopted by one of the health facilities of the area. For each block, the households were listed by interviewers according to the method of steps from 1 to 5 and on the basis of the inclusion criteria: (i) being from 25 to 65 years old; ii) being the head of the family; iii) of living in the neighbourhood for at least the last twelve (12) months preceding the survey; iv) of having a member of the household with a fever syndrome during the last 12 twelve (12) months, including that of the survey. In total, 122 people were interviewed. One was discarded for failing to meet one of the inclusion criteria.

Results and discussion

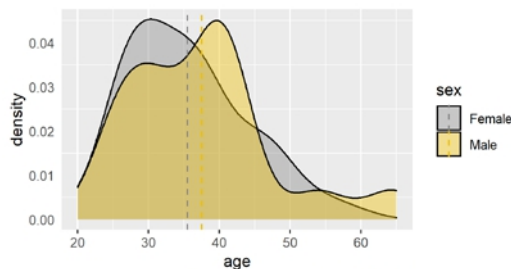
Socio-demographic profile of respondents

The study was carried out on a sample of 121 adults aged 25 to 65 (average age: 36.5 years), 73% of whom were women (Figure 3 and Figure 4).



Source: Survey data / Dec. 14-17, 2020

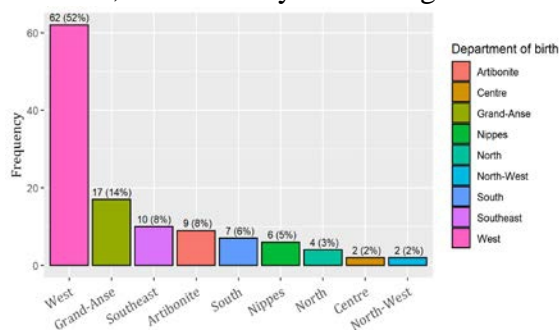
Figure 3. Distribution of the sample by gender



Source: Survey data / Dec. 14-17, 2020

Figure 4. Density graph of the age of respondents by gender

The study population is multi-regional (9/10 departments represented) with 52% originating from the Ouest department (Figure 5) and 63% from the metropolitan area of Port-au-Prince. These are people who have settled in Jalousie for more than 5 years (90%). In fact, 80% of them have lived there for 6 to 25 years (80%) while 36% immigrated there in search of a better life and to improve their living conditions. Others (28%), taken there by their parents during childhood, chose to stay in the neighbourhood even as adults.



Source: Survey data / Dec. 14-17, 2020

Figure 5. Distribution of the sample according to the departments of origin

Before residing in Jalousie, 64% of the population practiced agriculture and fishing. However, having emigrated to the western metropolitan area, they turned to informal trade (60%). 94%, including

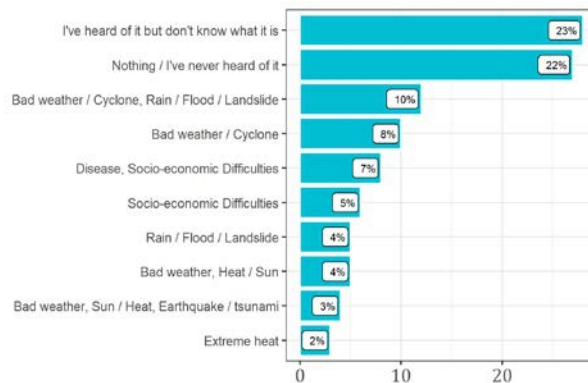
entrepreneurs (6%) and workers (12%), reported engaging in an income-generating activity to support the survival of households with more than 4 members according to the household density graph [Average height = 4.752066 (people)]. Note that 52% of the population lives in a free union (cohabitation).

In terms of education, the population is mixed. 86% attended school, 40% have reached secondary school, 20% and 17% have reached the 3rd and 2nd basic cycle respectively versus 9% in the 1st cycle of basic education. 3% went to college.

General knowledge of cchange

More than half of the population (52%) claim to have heard of climate change, on the other hand 36% are totally unaware of the concept. Note that 12% refrained from responding.

However, using the association method advocated by Abric (2001), respondents were asked to spontaneously choose three of the six responses that best described climate change. 44% said nothing because the concept is totally unknown to them (22%) or because they have heard of it but do not know what it refers to (22%). In 10% of the responses, climate change is assimilated with “bad weather / cyclone, floods, landslides”. 8% of the responses were specific to "bad weather / cyclone" approaching the harmful effects of climate change. For the rest, the responses are jumbled, associating climate change with preexisting situations likely to cause disease (epidemics) as well as economic difficulties, etc. (Figure 6).



Source: Survey data / Dec. 14-17, 2020

Figure 6. Definition of climate change by respondents

In another question, we sought to identify the extent to which the population is aware of changes taking place in the ecosystem without reference to climate change. The five largest observations attest to the multiplication of cases of influenza and fever (23%), temperature rises (19%); the drop in local

agricultural production (15%); drought of rivers, irrigation canals and water sources (14%); the proliferation of mosquitoes (10%) (Figure 7).

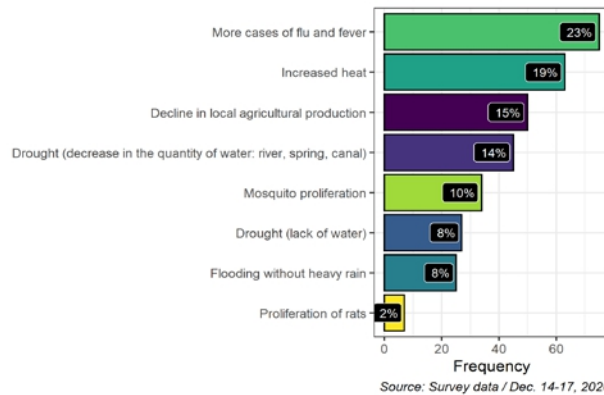


Figure 7. Effects of climate change observed by respondents

To have more elements of representation of diseases linked to climate change, we also sought to understand to what extent respondents felt concerned by environmental problems without alluding to climate change. This was in the eventuality of circumventing the possible biases due to ignorance of the concept by respondents on the one hand, and to assess what their greatest concern relates to, considering the postulate of Seidel (1998) according to which poverty reinforces barriers to the development of climate change mitigation and adaptation behaviors.

On a scale of 1 to 3, applicants rated the highest score (3) as the situation of greatest concern to them. Environmental problems were not among the 3 situations chosen by the sample. Political unrest / insecurity worries came first (42%) followed by fetishism (36%) then health problems including cancer, HIV and COVID19 (33%), poverty / economic problems attributing unemployment, lack of money, undernourishment, etc. (32.38%). Environmental issues came fifth (Figure 8) in the top 5 items of the ranking (31.96≈32%).

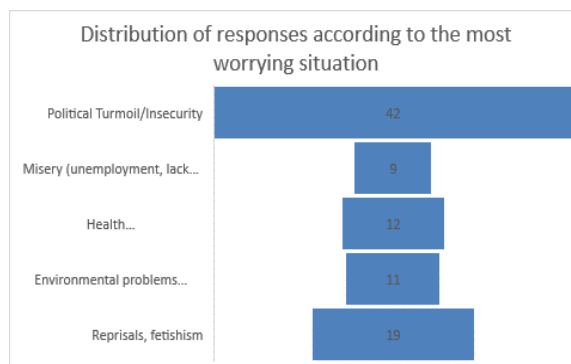


Figure 8. Situation considered the most worrying by the respondents.
 Social representations of vector-borne diseases in a context of climate change

The survey sought to find out whether the respondents were directly or indirectly affected (him or a member of the household) by any of the vector pathologies selected. This makes it possible to understand that the respondents have already been confronted with the situation for which we were evaluating their social representations. They were asked to mention the frequency of the febrile pathologies to which they have been affected during the last 5 years. According to the data collected, cases of fever lasting more than three days (82%) were the most frequent. This was followed by influenza (77%), Zika (52%), malaria (39%) and chikungunya (37%) and dengue fever (30%) (Figure 9).

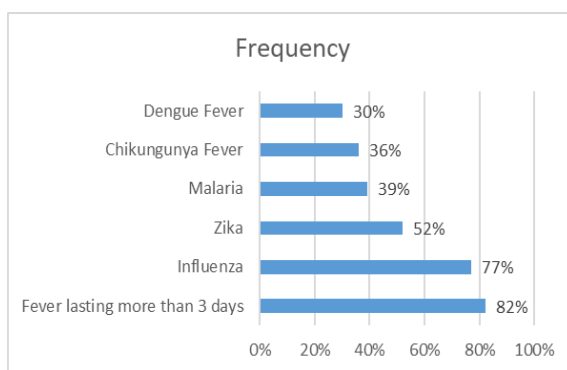


Figure 9. Frequency of cases of vector-borne pathologies and other fevers among respondents over the past 5 years

Before evaluating the social representations of vector-borne diseases, the investigators shared information on climate change with emphasis on its effects on human health from an informative flyer developed for this purpose. To assess the social representations of vector-borne disease transmission, association (Abric, 2001) and evocation (Vergès, 2001) methods were pooled in the survey questionnaire. Respondents had to associate the transmission of each of the pathologies with climate change or with one of the elements of Haitian popular knowledge (God, Fetishism, Undernourishment) often reported in cases of illnesses in general and in cases of febrile syndromes in particular. They also had the choice of bringing up others.

The results revealed that 17% of the respondents did not make any association with vector-borne diseases. In 17% of cases, these were simply epidemics, while for 61% of responses, these epidemics came from various sources: i) pre-existing diseases in space (18%); ii) bad weather (10%), among others (Figure 10).

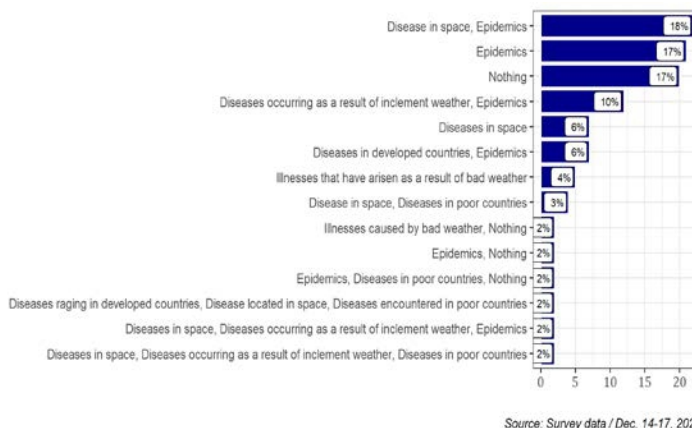


Figure 10. Perception of Diseases linked to climate change among respondents

Bivariate analyses with age and then with academic level show no interdependence with the representation that respondents have of the transmission of diseases linked to climate change. On the other hand, crossing with the gender of the respondents shows a tendency of correlation although we did not find it relevant to confirm this interdependence from the test, that is to say women made up a higher proportion of respondents who made no association with diseases linked to climate change (19% women vs. 9% men) (Figure 11).

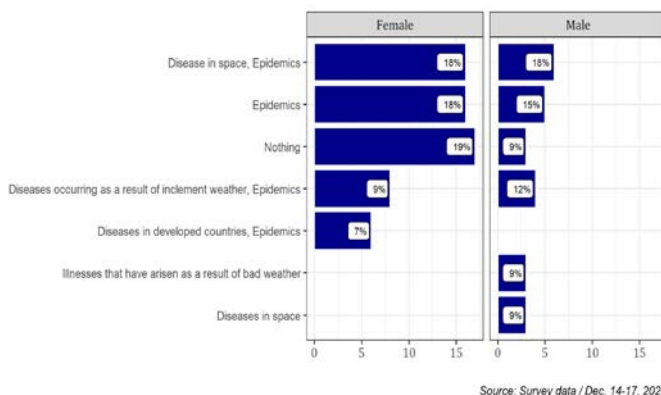


Figure 11. Perception of respondents of diseases linked to climate change (according to gender)

Community actions for adaptation to climate change

The study assessed the position of the population on the need for the country and their neighborhood to adopt behaviors favorable to adaptation and mitigation of climate change through community and personal actions. This should make it possible to assess their level of awareness of the issue of climate change. 64% of them believed that community actions are necessary in Haiti for adaptation to climate change. Of this proportion, 47% spoke with

conviction (yes, necessarily) versus 19% who were less convinced (yes, maybe). For the remaining 19%, no action is necessary.

However, when the question was more specific and directly related to their neighborhood of residence, 78% said that the population of Jalousie have an obligation to take actions to reduce or protect themselves from the harmful effects of climate change while 60% of this population think the neighborhood is less exposed than the rest of the country. To prevent vector-borne diseases, they had to choose the three actions they considered most plausible in the direction of what they were prepared to take. According to the responses: i) 23% chose not to throw rubbish in the streets; ii) 22% to avoid keeping standing water; iii) 21% to keep the neighborhood clean; 18% to ask to move from Jalousie to live in a cleaner neighborhood and, v) 8% to consume a balanced diet (better eating).

Conclusion

The aim of the study was not to search for the SRs of climate change. However, it does tell us about a fundamental building block for a science dissemination program on climate change: the concept is unfamiliar to the study population, who have a misconception of it. For lack of information and understanding on climate change, they associate it with natural temperature variations due to seasonal changes [climate refers to temperature which implies climate change = temperature change (hot weather, rainy weather in Haiti)].

In this case, the construction of the central core of social representations of climate change and the transmission of vector-borne pathologies focuses on empirical knowledge having as its object (symbolic elements) bad weather, epidemics and what the respondents call preexisting diseases in the air (Abric, 2001; Lo Monaco and Lheureux 2007). This association refers to popular beliefs in the abundant Haitian oral literature that combine epidemics of fever, flu and rainy periods that bring all kinds of diseases from space (the air). Indeed, in Haiti, epidemics, unusual natural disasters (the earthquake of January 12 for example) are explained in this sense: it is due to something in "the air" (that is to say, uncontrollable), mysterious, etc.). Within this population, therefore, there is a form of knowledge of vector-borne diseases that is socially developed and shared, with a practical aim that contributes (Hidalgo, 2012; Jodelet, 1989) to the choices they have made to adopt behaviors relating to environmental hygiene to protect against such diseases: do not throw rubbish in the streets; avoid keeping stagnant water; keep the neighborhood clean. This knowledge, an important element in the conditionality of the existence of RS, could take shape in the assiduous education campaigns carried out within the framework of vector control in Haiti; particularly regarding malaria in accordance with

the objective of the Ministry of Public Health through its strategic plan to reduce local transmission to 0/100 by 2020 (MSPP, 2013). The respondents do not make any association of vector pathologies with God fetishism, or climate change. However, can it be said that education programs for the prevention of malaria have succeeded in influencing popular beliefs in the construction of SRs for this vector-borne pathology? A study of the SRs of vector-borne diseases like malaria, without taking into account climate change, could reveal the weight of cultural elements (popular knowledge).

Furthermore, the existence of SR requires “recurring practices” that assume a level of experience in relation to the object in question (knowledge and duration of experience in relation to the object) (Depeau, 2006). In the case of our sample, experience with vector-borne diseases consists of a recurrence of the latter or of fevers and flu during and after rainy periods on the one hand, and practices against the proliferation of mosquitoes and protection against their bites (ref. distribution of mosquito nets as part of malaria programs (OPS, 2017)). These prevention practices condition and reinforce the common belief of the respondents on the measures deemed more easily adoptable to protect themselves from vector-borne diseases. It is clear that this collective social consciousness that constitutes SR does not yet exist around the concept of climate change and vector-borne diseases in the study population; it therefore leads to erroneous beliefs which, among other things, can constitute a considerable barrier to education when attempts are made to get it to adopt adaptive and attenuating behaviors (Pruneau et al. 2006; Maiteny, 2002).

The study did not go so far as to identify the organization and the relationship of social representations of vector-borne diseases with objects such as the situation considered to be the most worrying (Figure 7) and the pathologies of possibly vector or viral sources experienced by respondents (Figure 6). Such analyses would provide better understanding of the structure and organization of the social representations of respondents regarding vector-borne diseases. These data collected during our investigation will be made available for use by interested researchers and / or may be the subject of another article from us. In the meantime, this in no way detracts from the scientificity and relevance of the study, the first in Haiti on the social representations of vector-borne diseases in a context of climate change. It promotes the sociocognitive salience of climate change as an abstract and generic concept, thus initiating the construction of social representations relating to it, if only among the respondents. In addition, it paves the way for several SAR studies that could greatly contribute to the policies and strategies of education programs and the dissemination of scientific knowledge from a global health perspective. These studies could take the form of: i) a study of social representations of malaria to assess the place of cultural elements; ii) a

study of the SR (opinion) of religious leaders of all faiths in connection with the choice of churches as a channel for disseminating messages relating to environmental education during religious services and events, a choice made by 16% of the respondents.

Authors' Contributions: Study design – Evens Emmanuel. Writing of the original study protocol – Ammcise Apply. Preparation of the data collection tool – Ammcise Apply. Validation of the data collection tool - Evens Emmanuel, Francklin Benjamin. Data collection, the processing of data and their analysis - Ammcise Apply, Daphenide St Louis, Daphnée Michel and Lucainson Raymond. Writing of the first draft of the paper – Ammcise Apply. Review, editing and revised version - Francklin Benjamin and Evens Emmanuel. All the authors have read and agreed to the published version of the manuscript.

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References:

1. Abric, J. C. (2001). L'approche structurale des représentations sociales: développements récents. *Psychologie et société*, 4(2), 81-103.
2. Bard, D. (2007) Health Consequences of Climate Change. *Integr J Med Sci* ;4(1):7-11. <https://doi.org/10.15342/ijms.v4is.133>
3. Bras A. (2010). Éléments pour une définition de la problématique de la propreté urbaine en Haïti: le cas de Port-au-Prince (Doctoral dissertation, Thèse de Doctorat. L'Institut national des sciences appliquées de Lyon et l'université Quisqueya).
4. Bras, A., Prince, N., Joseph, O., Telcy, D. (2017). Approvisionnement en eau à Carrefour-Feuilles : entre informalité et violence urbaine. In.: Bezunesh Tamru, Evens Emmanuel, Alphonse Yapi-Diahou, Anie Bras, Jean-Fritzner Etienne (Editeurs). Pré-actes du colloque international «Quel développement urbain pour la Ville post-crise ?», PRCU, 25-27 avril 2017, Port-au-Prince: Éditions pédagogiques nouvelles. p.107-113. (hal-01512254)
5. Darbouze, J., Simonneau, C., Hanin, Y. (2018). Métropoles, Métropolisation. Précisions sémantiques, état des lieux dans les pays

- du Sud et introduction à l'aire métropolitaine de Port-au-Prince. In.: Perspectives de Développement de l'aire métropolitaine de Port-au-Prince, horizon 2030. Rapport. Programme de recherche dans le champ de l'urbain FED/2015/360-478. p.41-89
6. Depeau, S. (2006). De la représentation sociale à la cognition spatiale et environnementale: la notion de «représentation» en psychologie sociale et environnementale. <https://hal.laas.fr/UR2-HB/halshs-00259210>
 7. GIEC (2001). Des changements climatiques: Les éléments scientifiques. Contribution du Groupe de travail I au troisième rapport d'évaluation du Groupe d'experts intergouvernemental sur l'évolution du climat, Rapport du Groupe de travail I du GIEC. 90p.
 8. IPCC, (2014) Climate change 2014: synthesis report. In: Core Writing Team, Pachauri RK, Meyer LA (eds) Contribution of working groups I, II and III to the fifth assessment report of the intergovernmental panel on climate change. Geneva: IPCC, 151p.
 9. Gilles, A., Joseph, O., St-Fleur, S. (2015). Étude Formative en assainissement, design technique de système d'assainissement et plan de communication pour la promotion de l'assainissement en Haïti. Rapport final. Port-au-Prince: Laboratoire de Qualité de l'Eau et de l'Environnement – Université Quisqueya, 126p.
 10. Hales S, Kovats S, Lloyd S, Campbell-Lendrum D. (2014). Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s. Geneva: World Health Organization. ISBN 978 92 4 150769 1. https://apps.who.int/iris/bitstream/handle/10665/134014/9789241507691_eng.pdf
 11. IHE et ICF. (2018). Enquête Mortalité, Morbidité et Utilisation des Services (EMMUS-VI 2016–2017). Pétiion-Ville:IHE (Institut Haïtien de l'Enfance), et Rockville:ICF.
 12. Jodelet, D. (1984). Réflexions sur le traitement de la notion de représentation sociale en psychologie sociale. Communication. Information Médias Théories, 6(2):14-41.
 13. Jodelet, D. (1989). Les représentations sociales : un domaine en expansion. In.: Les représentations sociales (Sous la direction de Denise Jodelet). Paris:Presses Universitaire de France. 1ère édition. 447 p.
 14. Knapp, C. E. (2002). Invisible Walls: Why We Ignore the Damage We Inflict on the Planet... and Ourselves. (Book review: Séidel, P. (2001). Invisible walls: why we ignore the damage we inflict on the planet and ourselves.The Journal of Environmental Education, 33(3), 43.

15. Milian, J., Konshina, E. (2017). L'étalement urbain en périphérie de Port-au-Prince : Formes hydriques et urbanisation incomplète. In.: Bezunesh Tamru, Evens Emmanuel, Alphonse Yapi-Diahou, Anie Bras, Jean-Fritzner Etienne (Editeurs). Pré-actes du colloque international «Quel développement urbain pour la Ville post-crise ? », PRCU, 25-27 avril 2017, Port-au-Prince: Éditions pédagogiques nouvelles. p. 37-38. (hal-01512254)
16. Lizarralde, G., Petter, A.M, Jean Julien, O., Bouchereau, K. (2018) : L'Habitat dans la Zone Métropolitaine de Port-au-Prince : Principales Représentations, Défis, Opportunités et Prospectives. In : Perspectives de Développement de l'Aire Métropolitaine de Port-au-Prince, A l'Horizon 2030. Rapport de Recherche dans le Champ de l'urbain, UniQ et Co. (2018). FED/2015/360-478, 325p.
17. Monaco, G. L., & Lheureux, F. (2007). Représentations Sociales: théorie du noyau central et méthodes d'étude. *Revue électronique de psychologie sociale*, 1-55.
18. Maiteny, P. T. (2002). Mind in the Gap: summary of research exploring 'inner' influences on pro-sustainability learning and behaviour. *Education Research*. 8(3):299-306. <https://doi.org/10.1080/13504620220145447>.
19. Hidalgo, M. (2012). Représentations sociales et contextes: études autour de l'expression et des comportements en lien avec les éléments masqués (Doctoral dissertation, Aix-Marseille).
20. McDaniels, T., Axelrod, L. J., Slovic, P. (1996). Perceived ecological risks of global change: A psychometric comparison of causes and consequences. *Global environmental change*, 6(2), 159-171. [https://doi.org/10.1016/0959-3780\(96\)00006-4](https://doi.org/10.1016/0959-3780(96)00006-4)
21. McMichael, A. J., Campbell-Lendrum, D. H., Corvalán, C. F., Ebi, K. L., Githeko, A., Scheraga, J. D., & Woodward, A. (2003). *Climate change and human health: risks and responses*. Geneva: WHO, WMO, UNEP.
22. Moscovici, S. (1954). L'analyse hiérarchique. Sur une contribution importante à la construction des échelles. *L'année psychologique*, 54(1), 83-110. <https://doi.org/10.3406/psy.1954.30160>
23. Moscovici, S. (2003). Des Représentations Collectives aux Représentations Sociales : Éléments pour une histoire. In.: Denise Jodelet. *Les représentations sociales* (Sous la direction de). Paris:Presses Universitaire de France. 1ère édition. P.79-103. ISBN 9782130537656.

24. MSPP (2013). Plan Directeur de Santé 2012-2022. Port-au-Prince: Ministère de la Santé Publique et de la Population (MSPP). <https://mspp.gouv.ht>
25. OPS (2017). Santé dans les Amériques. Organisation Panaméricaine de la Santé (OPS). Résumé du pays : Haïti. https://www.paho.org/salud-en-las-americanas-2017/?page_t_fr=Haïti&lang=fr
26. Olivier, D. (2018). Les quartiers précaires de Port-au-Prince : entre pauvreté, violence et ONG. In.: Perspectives de Développement de l'aire métropolitaine de Port-au-Prince, horizon 2030. Rapport. Programme de recherche dans le champ de l'urbain FED/2015/360-478. p.149-152
27. Perspectives Monde (2020). Haïti Population Totale Statistique. Sherbrooke:Université de Sherbrooke. <https://www.perspectives.usherbrooke.ca>
28. Pilkington H. Quality of care in a vulnerable environment: assessing intra-urban variations in general service readiness of healthcare facilities in the Metropolitan Area of Port-au-Prince (Haïti). In.: Bezunesh Tamru, Evens Emmanuel, Alphonse Yapi-Diahou, Anie Bras, Jean-Fritzner Etienne (Editeurs). Pré-actes du colloque international «Quel développement urbain pour la Ville post-crise ? », PRCU, 25-27 avril 2017, Port-au-Prince: Éditions pédagogiques nouvelles. p.71-74.
29. Pruneau, D., Demers, M., & Khattabi, A. (2008). Éduquer et communiquer en matière de changements climatiques: défis et possibilités. [VertigO] La revue électronique en sciences de l'environnement, 8(2).
30. Singh, B., Cohen, M. J. (2014). Adaptation aux changements climatiques : Le cas d'Haïti. OXFAM, Rapports de recherche. 42p.
31. Vergès, P. (2001). L'analyse des représentations sociales par questionnaires. Revue française de sociologie, 537-561. https://www.persee.fr/doc/rfsoc_0035-2969_2001_num_42_3_5373 Verret, A.L., Bras, A., Emmanuel, E. (2017). De l'informalité à la gestion alternative d'une ville soutenable: Le cas de Canaan. In.: Bezunesh Tamru, Evens Emmanuel, Alphonse Yapi-Diahou, Anie Bras, Jean-Fritzner Etienne (Editeurs). Pré-actes du colloque international «Quel développement urbain pour la Ville post-crise ? », PRCU, 25-27 avril 2017, Port-au-Prince: Éditions pédagogiques nouvelles. p.115-121.



Resource Sustainability, Cooperation Risk Management Capacity and NPO Social Entrepreneurship Activity: A Conceptual Model

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Abstract

Gaining knowledge about social entrepreneurship is important for nonprofit organizations to support their development process. Despite the different studies that treat social entrepreneurship, the role of the Cooperation Risk Management capacity in implementing a social entrepreneurial activity remains an unexplored research field. Scholars have paid particular attention to the capabilities that enable nonprofits to innovate and create social entrepreneurial activities. This paper aims to bridge resources' sustainability and social entrepreneurial activity. For so, social resource-based view theory is mobilized to present a conceptual model that highlights the indirect effect of nonprofit organization's resources sustainability through the mediation of cooperation risk management capacity. This paper sums up with potential implications for future empirical studies.

Keywords: Nonprofit Organization, Resource-Based View, Capabilities, Cooperation Risk Management Capacity, Social Entrepreneurship Activity

Introduction

An empirical study of over 200 Nonprofit Organizations (NPOs) has shown that the sustainability issue is one of their main concerns. Establishing

new revenue-generating entrepreneurial activities makes 70% of these nonprofits operating in the social entrepreneurship zone (Di Zhang & Swanson, 2013).

Furthermore, as new forms of social entrepreneurship are emerging in a context where public institutions, for-profit organizations, and non-profits interact, the risk inherent to the social entrepreneurship activity (SEA) remains a relevant topic. According to Macko & Tyszka (2009), implementing a SEA is a risky decision to make. It is related to a significant degree of risk-taking compared to the implementation of other entrepreneurial activities. Since nonprofit's SEA process promotes cooperation between several stakeholders (Dees et al., 2002; Gras & Mendoza-Abarca, 2014; Liu et al., 2015), the focus is on the potential mediation of Cooperation Risk Management (CRM) capacity to explain the resources sustainability effect on SEA implementation. In this regard, Chunlei et al. (2016) express that the non-profit organization maintains cooperative relationships with organizations when the cooperation risk is controlled to a minimum degree and thanks to the entrepreneurial team capabilities. These capabilities can be crucial in the social entrepreneurial process where financial risk and entrepreneurial risk intersect (Achibane & Tlaty, 2018). Thus, an efficient NPO entrepreneurial risk management could be determinant for a good implementation of a SEA. It is notably in this perspective of the idea that we aim to identify the theoretical elements that contribute to a comprehensive understanding of our model. By using social Resource-Based View (RBV) we will explain and discuss the role of resources and organizational capabilities in the making of SEA. More specifically, the proposed conceptual model extends the SEA implementation model to include two constructs namely, resources sustainability and CRM capacity. The aim is to eliminate any confusion between the fields of social entrepreneurship and risk. This without forgetting to shed light on the economic risk related to cooperation.

A theoretical framework of the conceptual constructs is presented to explain the role of CRM capacity in the implementation of SEA. For so, SEA pillars and the capabilities required to form the CRM capacity and the main theoretical elements that describe the NPOs resource's sustainable nature are identified. That is to highlight the CRM capacity effects on SEA which needs sustainable resources for its implementation.

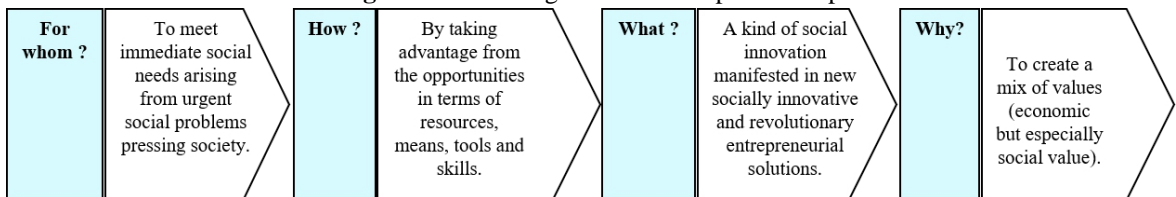
What is social entrepreneurship?

Social entrepreneurship consists of facing immediate social problems (Alvord et al., 2004). Creating and managing profit organizations or nonprofits and facing social problems by creating a systemic and sustainable social change through adopting new ideas, methods, and changing attitudes are the social entrepreneur missions (Kramer, 2005).

Mair & Martí, (2006) emphasize the innovative combination of resources. The importance of this innovative combination lies in its contribution as an innovative solution to the social problems facing society. Indeed, a simple change in the mix of nonprofits' resources can help generate the social impact that they set as an initial goal. Also, according to Austin et al. (2006), social entrepreneurship is an innovative activity that stimulates social value creation. It can occur within or through the non-profit, commercial, and government sectors. Sharir & Lerner (2006) attribute to social entrepreneurship the purpose of implementing business strategies to deal with complex social problems for which policymakers have not found effective remedies. As Mair & Martí (2006) gave to social entrepreneurship a definition that highlights the functional aspects while disregarding the institutional ones, Nicholls (2006) expresses that social entrepreneurship is occurring when individuals can use business techniques in some way to reach a positive social change.

Peredo & McLean (2006) include the essential elements from the above definitions in their description. Their core idea focuses on innovative social value creation. It is about exploiting social opportunities that society offers by taking a higher level of risk than the norm. This risk-taking manifests itself in proposing revolutionary solutions to the complex social problems (Alvord et al., 2004; Defourny & Nyssens, 2010b; Sharir & Lerner, 2006). According to Peredo & McLean (2006), the main concern in social entrepreneurship is to ensure the sustainability of the social enterprise, whatever will be the challenges it may eventually face. The definitions above, bring the answer to these questions: For whom? How? What? and why? And schematizes all that social entrepreneurship means. The figure below shows briefly the meaning of social entrepreneurship by answering the four questions.

Fig. 1: The meaning of social entrepreneurship



Source: Developed based on Alvord et al., 2004; Kramer, 2005; Mair & Martí, 2006

NPO social entrepreneurship: Definitions and pillars

The social entrepreneurship concept emerged during the 1980s and it has become more present in recent years (Kamdern, 2016, p. 30). It has emerged as a way of expressing the dynamism of people who combine social activism and entrepreneurial skills. People who can see what others do not see, who can value what others are not enabled to value and who can manage while

others cannot. Social entrepreneurship is about taking opportunities from social needs and satisfying them through innovative entrepreneurial solutions (Braunerhjelm & Hamilton, 2012, p. 12).

While entrepreneurship is a value proposition responding to a need expressed by the market for financial profit, social entrepreneurship is a value proposition meeting a social need expressed by a given population. Social entrepreneurship aims to respond to the identified needs of society. Anticipating and organizing actions to create significant social benefits for society through satisfying social needs is also the aim of enterprising nonprofits. The main objective is social welfare. Social needs that could be addressed by nonprofits social entrepreneurship may include prevention against social ills, such as suicide, violence, sexual abuse, and drug addiction. Taking care of abandoned children and social integration of people with disabilities, as well as social assistance for people who have experienced separation or divorce, are all social needs that can be met through NPOs social entrepreneurship activities. In the following lines, NPO's SEA and its five pillars will be addressed.

NPO social entrepreneurship activity

Social entrepreneurship is about creating a movement of force that generates social change. This is done by taking the risk of using entrepreneurial technics to transform the change into a real impact on society. Entrepreneurial technics are used as tools to generate incomes to reinvest them in the social impact sustainability. It is a process of creating social value, bringing social change through direct action such as social transformation, social benefit, and also economic value namely wealth and employment. It is thus an entrepreneurial process of discovering, evaluating, and exploiting opportunities. This process encompasses the mobilization and allocation of funding, materials, and human resources (manpower and skills). An allocation that must have a positive impact on society through an innovative response to a detected social need. The importance of social entrepreneurship lies in proposing revolutionary responses to urgent and complex social problems (Alvord et al., 2004; Defourny & Nyssens, 2010a; Sharir & Lerner, 2006). Also, it lies in the fact that it carries out a central, purely social mission, which is the creation of social value-added. In social entrepreneurship, the capacity of creative thinkers that characterizes this emerging entrepreneurial approach serves to push other activists as stakeholders to involve and exercise social entrepreneurship through alternative organizational structures, such as for-profit social enterprises, non-profit organizations, and other social enterprises.

For these reasons, the implementation of SEA is an entrepreneurial adventure in which the actor is a catalyst of socio-economic development. Social entrepreneurship actors combine street activism, pragmatism,

professional skills, and tactical trust to achieve public interest objectives. These actors often try to bring solutions to the negative externalities of the capitalist system in an entrepreneurial firm. Massarsky (2006) refers to social entrepreneurship as any commercial activity that emerges from the social actor's desire to create a social initiative to be able to generate revenues. This will enable any social actor such as non-profits to achieve their social goals. Nevertheless, creating commercial activities by non-profit organizations that lack financial resources and aiming to implement social projects is not that easy without collaborating with institutions such as public, private, or other NPOs.

Thus, NPOs' social entrepreneurial activities are an ethical optimization of every tool and resource to participate sustainably in social welfare. So, each revolutionary social response proposed, in an entrepreneurial way, for an urgent social problem is considered as part of this emerging entrepreneurial field. The economic risk associated with this venture is characterized by a high intensity due to the innovative nature of the social intervention. An intervention that consists of ideas, capabilities, and resource mobilization allows a social sustainable transformation through social arrangements. As every undertaking decision implies a risk-taking degree (Macko & Tyszka, 2009), the decision of engaging in cooperation relationships to implement SEA is also a risky decision to make.

The risky nature of the NPO social entrepreneurship process

Social entrepreneurship is a succession of innovative use of available resource steps when seeking to exploit social opportunities. The objective is to create added value to improve the social situation of a given population in need. It is a process in which cooperation can be an innovative tool for sharing and using resources.

In all social entrepreneurship steps, social actors are exposed to the economic risk inherent to cooperation. The steps require a significant degree of risk-taking compared to cooperation for other traditional entrepreneurial activities' implementation. This is due to the complexity of the cooperation risk factors inherent to social entrepreneurship. The economic risk-cooperation can occur when non-achieving the social objective is already fixed. When risk-cooperation is not enough controlled, the consequences may attain the collaborators' interest and the organization's reputation. Moreover, the consequences may contribute to the activity declining or ending. The process of implementing SEA does not lack economic risk. The triggering factors of this risk depend on several elements such as:

- A misunderstanding of the social problem, its constraints, and the heavy cost of the proposed solution;

- Lack of flexibility in hierarchical structures due to bureaucratization, lack or inadequacy of funding, or the time lag between timeframes are other factors that can hinder the process of implementing SEA;
- Lack of a common indicators vocabulary of measuring social impact and the contribution of each actor to its creation;
- The discrepancy between the different requirements of actors that create a culture shock in cooperative work;
- Absence of convergence points ;
- Discontinuity in stakeholders' commitment.

To sum up, although business disruption, the loss of the institution's image, and the loss of employees could be the consequences of one of the triggering factors of cooperation risk mentioned above, the implementation of the NPO's SEA requires building various capabilities to manage this risk. Thus, the importance of CRM capacity.

Cooperation Risk Management capacity

Strengthening the CRM capacity is the organizational concern of every institution and also is the case for NPOs. Knowing how to manage cooperation risk factors or how to adapt with them empower the control of the cooperation risk. We are using the expression CRM capacity to refer to the ability of the organization to deal with the consequences of the cooperation risk occurrence. The Social Research-Based-View (SRBV) theory stressed the role of the dynamic capabilities of an institution (Da Silva & Bitencourt, 2018). It states that dynamic capabilities depend on the origin and sustainable nature of the resources accumulated and exploited to acquire and develop these capabilities. So, to counteract the cooperation risk factors, it is necessary to take advantage of the sustainability and stability of resources to develop the quality of the three kinds of capital: social, political, and entrepreneurial. The cooperation risk control allows a healthy cooperative relationship with all the NPOs' stakeholders. Thus, the more NPOs are based on sustainable resources, the higher is their capacity to manage the cooperation risk.

Entrepreneurial capabilities

In an increasingly competitive market, social enterprises are now considered as entities competing with other business counterparts competing for survival and growth.

As is the case for commercial enterprises, non-profits are also under the obligation of using innovative entrepreneurial practices. Outperforming their main rivals requires NPOs to pursue strategies that aim to create significant social value for the benefit of their various stakeholders. For these reasons, the community actors must be formed in entrepreneurship and be

supported to develop their capabilities to undertake more projects. This development process may lead to the constitution of entrepreneurial capital. Forming entrepreneurial capital requires the enhancement of capabilities that enable strategic social intelligence, creating and prototyping, building and maintaining quality relationships, and revenue generation. During the design and implementation phase, a high level of risk tolerance in decision-making is also a key factor in building capabilities. These elements should be taken as important in the implementation of SEA.

Firstly, one of the key capabilities is the ability to monitor and learn from market changes. Monitoring changes affecting the communities' social needs promotes the strategic development of NPO's activities. Strategic social intelligence capability is an important determinant of effectiveness and efficiency in terms of achieving social objectives. The higher the quality of this capability is, the more it contributes to the development of NPO's entrepreneurial capital.

Secondly, the design approach has proven worthwhile in innovation for social entrepreneurship. It is an approach based on a user-centered perspective and stakeholder involvement. This is achieved through participatory design and rapid prototyping. Prototyping reveals both opportunities and dilemmas (Hillgren, Seravalli, & Emilson, 2011, p. 170). Its strengths lie in the fact that it is a visualization technic that supports the involvement of various stakeholders in the process. Being user-centric, prototyping complements the failure of the 'top-down' approaches (Mubita et al., 2017) and enables the new models' rapid testing in practice.

Thirdly, building and forging quality relationships is also a key capability for the development of entrepreneurial capital. The results of a survey carried out on a representative sample of 225 NPOs with a social mission, reveal that close relationships based on commitment and trust promote the development of social entrepreneurship innovations in NPOs (Sanzo et al., 2015). This effect depends on the nature of the organizations' contribution to these cooperating relationships and on their ability to make the collaboration a successful one. Social cooperation entrepreneurial issues are then manageable when relationships are based on trust as a resource and entrepreneurial commitment as an ability.

Fourthly, NPOs make great efforts and suffer while seeking funds to finance their activities (Di Zhang & Swanson, 2013; Doherty et al., 2014; Kickul & Lyons, 2015). Many difficulties are controverting them from attracting funds through traditional sources such as loans (Weerawardena & Mort, 2006). Therefore, NPOs focusing on the development of their strategy must strengthen their ability to generate revenues (Bacq & Eddleston, 2016) by developing and exploiting their sense of creativity. It has been shown that the ability to generate revenues in excess from expenses is important to the

development of a business model (Dart, 2004) and allows the revenues-generating segment to finance the NPO's social activities (Boschee, 2001). As a result, they develop the ability to become "*financially self-sufficient*" (Boschee, 1998, p. 3) and less dependent on government and donations (Bacq & Eddleston, 2016, p.6). Indeed, revenues can be directly generated from beneficiaries, as in the case of fee-for-service (Ebrahim et al., 2014) or in the case of Better-off-customers, where consumers seek to support charitable services (Bacq & Eddleston, 2016).

Finally, every entrepreneurial field implies a certain degree of risk-taking because creating something new is a risky entrepreneurial decision. However, the risk is even more intense in social entrepreneurship than in traditional entrepreneurship. According to Smith et al. (2014), this is because it is more likely to risk personal credibility than financial resources. NPOs leaders are individuals with a significant level of personal credibility (Dorado, 2006). Since it is systematically aligned with personal credibility, the organization's credibility stems from its strengths from the know-how and skills developed by leaders. It also stems its strengths from its leaders' integrity and ability to demonstrate their qualifications to stakeholders. The higher is the NPOs' risk tolerance, the more is the entrepreneurial capital.

Components such as skills and knowledge and the ability to assert their advantages to others are what define the credibility created among stakeholders. Therefore, social capital development is important for reinforcing relationships with stakeholders which can be possible through social capabilities enhancement.

Social capabilities

NPOs can aim to extend their social impact. Their mission is not only about producing goods or social services supply but about building strong social relationships. They are based on specific capabilities, such as their ability to attract support from various stakeholders, namely clients, client-beneficiaries, suppliers, donors, and local social actors (Bacq & Eddleston, 2016). Therefore, social capital is considered as "*an entrepreneurial outcome*" of the social entrepreneur efforts" (Thompson, 2002, p. 426)

NPOs are rooted in the social economy which, according to Fourel (2001) means not only the active participation of actors within their organization but also in the social life of the organization by using and reinforcing specific capabilities. Capabilities that require developing social capital by deploying social marketing strategies. This is through advertising and communicating about the targeted social impact. In the same way, there are two levels of analysis. The first level where the different relational capitals are federated and optimized to contribute to the creation of individual goods, and the second level of collective order, qualified as social capital. The latter

is considered as the social entrepreneurship activity's social implications (Van Ryzin et al., 2009). It refers to the ability to communicate effectively and interact with donors, beneficiaries, clients, and communities (Lumpkin et al., 2013). This with or without involving the latter in the production of the collective good (Boncler & Rispal, 2004, p. 24). Indeed, social capital development can be attained through the deployment of capabilities related to the strengthening of social cooperation relations. Social capabilities help strengthen the quality of the social capital developed by the NPOs. As a result, the organization gains more credibility with its various stakeholders. For instance, this is possible through communication and good cooperation with donors, customers and customers-beneficiaries (in the case of fee-for-service operations), beneficiaries and customers (in the case of better-off-customers operations) as well as with the entire community. The power of credibility lies not only in the fact that it facilitates the acquisition of resources within the cooperation network (Dees et al., 2002) but in the fact that it can also help the organization move beyond the immediate social cooperation network and find new opportunities.

Social capital aims to facilitate the design of a specific collective good benefiting a community that seeks a common need satisfaction. Social capital is a resource whose quality depends on the nature of interpersonal and inter-organizational ties that lies between the different actors. This reveals the importance of the organization's credible image among all stakeholders. The organization's credibility is recognized as a precious immaterial asset that can be negatively affected by marketing strategies that are insufficiently studied (Jiao, 2011). It is an intangible resource that forms the social capital of every social NPO. It helps to attract requisite resources in the most favorable way (Dees et al., 2002).

As an essential partner, the social organization must also have credibility with the government. Hence, the importance of developing political capital through political capabilities.

Political capabilities

Various researchers argued that organizations engaged in social entrepreneurship activities need to strengthen their political capital (Bacq & Eddleston, 2016; Bloom & Smith, 2010; Santos, 2012).

Many authors have associated political resources with Resource-Based-View Theory (RBV). It recognizes that government support is important as a key resource for any organization's success. When economic success is influenced by public relations or controlled by the government, political capital can lead to economic benefits for an organization that aims to reach its goals (Frynas, Mellahi, & Pigman, 2006, p. 341). Thus, this theory recognizes how government support affects organizations in terms of

effectiveness and efficiency (Boddeyn & Brewer, 1994; Frynas et al., 2006). It states that organizations' social initiatives can also benefit from cooperation with the government and gain legitimacy (Meyskens et al., 2010). Zahra, Newey & Li (2014) have shown the importance of cooperation with the government to increase social impact and ensure social efficiency (Adeniran & Johnston, 2012; Bacq & Eddleston, 2016). That is why NPOs must build their own political capital. Different activities contribute to the construction of political capital, including lobbying and advocacy in form of courts for social change (Bacq & Eddleston, 2016) and public relations. Frynas et al. (2006) describe government attributes as tools to enhance SEA to improve social and economic performance.

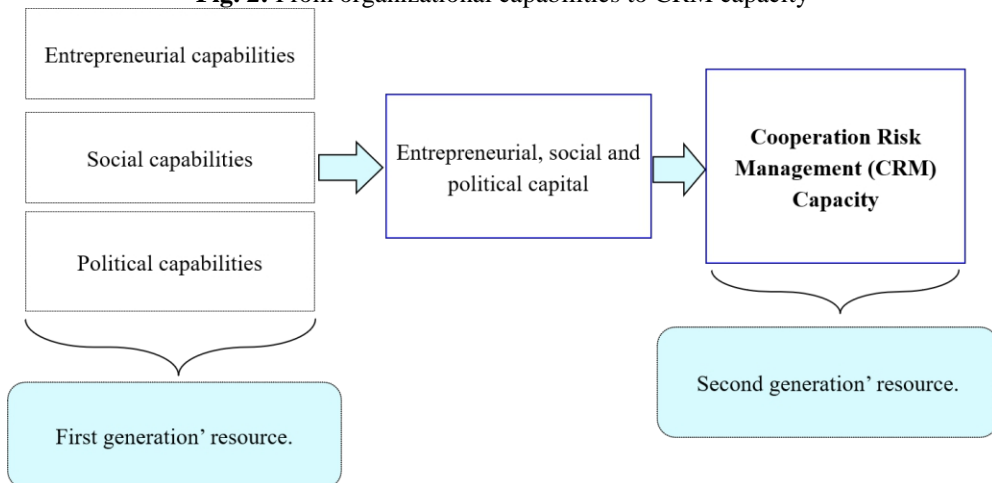
Again, the RBV argues that exclusive benefits related to the development of political capital are offered to organizations with social entrepreneurial activities whose access to resources is difficult. Di Domenico, Haugh & Tracey (2010) stipulate that through political activities, NPOs can influence political agendas and convince legislators that their mission is for the benefit of the community. Lack of government support could limit the ability of NPOs to realize benefits and prevent social problems in society (Santos, 2012). The same logic for the NPOs that cannot attract government support. They are confronted with limitations that can deprive them of achieving their social objectives (Renko, 2013; Zahra et al., 2014). Developing public or political relations and advocacy skills is one of the important capacities for attracting state support and assistance (Adeniran & Johnston, 2012; Bacq & Eddleston, 2016). Political activities allow NPOs to communicate the community needs to the government and, consequently, to gain its assistance for realizing their social mission. In other words, through advocacy and lobbying, NPOs change political decisions. They highlight the social needs of the population and persuade political decision-makers that their mission will serve the community. As a result, NPOs can be able to take advantage of legal changes that help them to generate the social impact (Bacq & Eddleston, 2016) they desire. This is through the implementation of social entrepreneurship projects or activities.

The political capital can be developed through lobbying. It is one of the political activities that enable NPOs to exert pressure on states. Valéau & Boncler (2012) stipulate that NPOs must seize the opportunity offered to them and target social needs that the states fail to meet. It is a way to attract the government support they need to carry out their social mission (Santos, 2012). To attract government support, NPOs also advocate bringing the desires and expectations of communities to the attention of political decision-makers (London, 2008). Indeed, government assistance facilitates the legitimacy of NPOs to ensure the continuity of their mission (Zahra et al., 2014). It contributes to increasing social impact by facilitating the process of

implementing social innovation. So, government regulations may increase the NPO's social impact level. This can be achieved through the contribution of government regulations on the social innovation quality level (Weber et al., 2012). In contexts where public policies reveal the growing importance of social innovation in society (Rollin & Vincent, 2007, p. 13), social innovation is recognized as a key element in the realization of SEA. These reasons have led researchers to recognize the importance of developing political capital for the emergence of social organizations (Bloom & Smith, 2010; Santos, 2012). Political support can be manifested as supporting legislations, laws, greater visibility of the social mission on the government's agenda or even financial assistance. Given the financial difficulties faced by NPOs, government support remains a necessity (Bacq & Eddleston, 2016). For the same reason, stakeholders' involvement is in the social innovation process leading to good SEA implementation. We assume that the nonprofits' ability to control risk factors can be identified based on the company's history and its rivals' experience.

All the previous organizational capabilities together define another type of resource from the second generation: The CRM capacity.

Fig. 2: From organizational capabilities to CRM capacity



Source: Developed based on Adeniran & Johnston, 2012; Bacq & Eddleston, 2016.

Resource sustainability

Tension will always occur between pursuing opportunities providing resources to sustain the undertaking initiative and doing businesses creating social value with no substantial sources of revenue to cover expenses. An opportunity “could gain feasibility over time as conditions change or resources become accessible from different investors” (Dees et al., 2002, p. 57). When assessing a social opportunity as well as a traditional one, it may lead to good social value but does not have necessarily high sustainability

potential. Dees et al. (2002) stress that *“In the absence of program or service endowments or government contracts there are few options for addressing long term sustainability potential”* (p.13). In this perspective, social entrepreneurship is about seeking to innovate new manners to get sustainable revenues to respond to the social problems of society.

Organizational forms requiring scarcer resources, for which acquisition is more uncertain, would have more problems sustaining activities than those requiring more stable and abundant resources (Pfeffer & Salancik, 2003, p. 47). With this in mind, Moizer & Tracey (2010) stressed that *“Sustainability should be an overriding objective for any kind of organization; but for social enterprise, it takes on particular importance because of the uncertain and complex nature of their operating environment (Austin et al., 2006). Indeed, this variable acts as a barometer for the overall health of the organization”* (p. 259). As nonprofits rarely have a research and development budget (Dees et al., 2002, p.13) the small ones are unable to engage in a long-term strategy. For instance, financial limitations can be crucial for paid staff recruitment (United Nations, 2003, p. 259).

Indeed, the mobilization of sustainable resources (Grant, 1991) can be favorable for the development of the NPOs' SEA because it may allow a continuous satisfaction of the community's social needs. Therefore, the funding of nonprofits is decisive for developing their activities. Furthermore, it guarantees the possibility of having better NPOs' social relationships with stakeholders. Nyssens (2006) states that the development of sustainable and direct contact with public authorities is often crucial to sustaining such activities in the long term. This especially when funding from a single source may deplete. In their book *"The external control of organizations: A Resource Dependence Perspective"* Pfeffer & Salancik (2003) explain that the reason for organizations' problems, including NPOs, lies in the fact that resources emerge from their environment. Different studies have shown that the implementation of NPOs' SEA is positively related to the sustainability of resources (Bacq & Eddleston, 2016; Di Zhang & Swanson, 2013; Meyskens et al., 2010; Renko, 2013). Having sustainable resources can contribute to the teams' skills enhancement and an entrepreneurial social work process based mainly on managerial practices. Practices that converge towards new social business models with stakeholders' involvement to achieve the targeted social aims (Snow et al., 2008). We distinguish three resources' origins to describe the sustainable nature of NPOs' resources. As Moizer & Tracey (2010) stressed, NPOs can rely on the membership fees and their financial business segments revenues. Government subsidies coming from suggested social projects can also be a source of sustainable resources as well as philanthropy in the form of donations and volunteering.

The proposed conceptual model

Different studies have shown that the SEA, and particularly the NPOs' SEA, is being positively related to their sustainable resources purchased (Moizer & Tracey, 2010). As a result, it appears that the implementation of SEA of NPOs exploiting different funding sources can be better when disposing of sustainable resources.

P1: The NPO resources sustainability has a positive effect on SEA implementation.

The NPO is seen as an incubator for social entrepreneurship practice. It is seen as an accelerating model of the social innovation process. Managerial solutions from the for-profit sector are adopted to gain sustainability and legitimacy. It innovates new ways of doing things, including cooperating with other stakeholders to share resources, knowledge, and risk (De Winne & Sels, 2010; Erikson, 2002) as benefits. These benefits promote the institution's sustainability. Resources are an indispensable element for the existence and sustainability of any entrepreneurial activity and even more in the social entrepreneurship field.

The NPOs resources' sustainability has a positive influence on its capacity to manage cooperation risk. It allows the improvement of NPO's SEA implementation level since it is considered as a second generation' resource that favors the development of the institution's political, social, and entrepreneurial capital quality. Consequently, it is expected that the capacity to manage risk is essential for explaining a better implementation of the NPO's SEA in cooperative relationships. Therefore, we suggest the following propositions:

P2.1: Sustainable resources had a positive effect on CRM capacity.

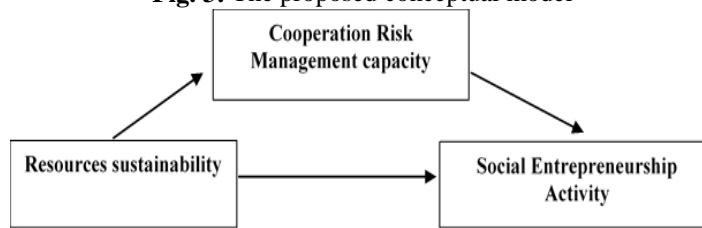
P2.2: CRM capacity has a positive effect on NPOs' SEA implementation.

Largely cited in the literature as a crucial element in the implementation of SEA, it appears that managing cooperation risk is a determinant factor. It affects NPOs that exploit several origins of resources. A certain degree of CRM capacity then proves a decisive condition for SEA implementation. Hence, the proposal of the mediating effect of the CRM capacity.

P3: The relationship between resource sustainability and NPO's SEA is mediated by CRM capacity.

As the good capacity to face stakeholder's cooperation constraints depends on resource origin, NPOs are likely to show different categories of capabilities. In this paper, we are interested in three types of capabilities. Each of them has its specific functions and contexts of use (Bhatt & Altinay, 2013; Liu et al., 2015; Mair & Noboa, 2006; Mort et al., 2003; Rodrigo-Alarcón et al., 2018).

Fig. 3: The proposed conceptual model



Conclusion

By exploring how the resources' sustainability may explain the extent of SEA, the present conceptual research shows that this relationship is an indirect one. This is due to the capabilities' diversification that NPOs require as a mediator for implementing SEA. A good capacity to manage cooperation risk may be sufficient for a strong cooperating relationship. They can be considered as strongly affecting the capacity to manage the cooperation risk triggering factors.

Theoretical contributions

This research paper aims to highlight the emerging movement of enterprising nonprofits. This is by advancing research about how NPOs seek to cooperate to implement SEA. As such, the paper highlights how entrepreneurial, social and political capabilities' enhancement can be strongly affecting factors on nonprofits' social entrepreneurship development. For example, while the theoretical contribution of Bacq & Eddleston (2016) was in extending RBV theory to the social enterprise by developing it through the integration of stakeholders' interaction with the latter, the contribution of this research is that it extends the RBV theory to NPOs SEA by integrating a second generation' resource namely CRM capacity.

Managerial implications

This research seems to have various managerial implications for future researchers and decision-makers for managing and developing nonprofits. It supplies insights about the importance of CRM capabilities under three forms social, political, and entrepreneurial. These are identified as scalers mediating the passage from resource supply to good SEA. Sustainable resources are critical conditions for the success of SEA. Nonprofits should invest in building capabilities as a way to develop the resources' supply conditions, in particular, for small NPOs with limited skills and resources. Exploring nonprofits' SEA from contexts geographically different can demonstrate the role of resources' sustainability and CRM capacity in SEA implementation. This is by exploiting the moderator effects analyzed from the research. The present conceptual research provides a fundamental basis for future empirical studies which

present a shortcoming of this paper to validate the conceptual model. Social entrepreneurship can embrace all the different approaches that can be adopted to develop and manage nonprofit institutions, namely Associations (Valéau & Boncler, 2012). They can eventually be the subject of analysis in future empirical studies.

References:

1. Achibane, M., & Tlaty, J. (2018). The entrepreneurial finance and the issue of funding startup companies. *European Scientific Journal*, 14(13), 268-279.
2. Adeniran, T. V., & Johnston, K. A. (2012). Investigating the dynamic capabilities and competitive advantage of South African SMEs. *African Journal of Business Management*, 6(11), 4088-4099.
3. Alvord, S. H., Brown, L. D., & Letts, C. W. (2004). Social Entrepreneurship and Societal Transformation: An Exploratory Study. *The Journal of Applied Behavioral Science*, 40(3), 260-282. <https://doi.org/10.1177/0021886304266847>
4. Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship: Theory and Practice*, 30(1), 1-22. <https://doi.org/10.1111/j.1540-6520.2006.00107.x>
5. Bacq, S., & Eddleston, K. A. (2016). A Resource-Based View of Social Entrepreneurship: How Stewardship Culture Benefits Scale of Social Impact. *Journal of Business Ethics*, 152(3), 589-611. <https://doi.org/10.1007/s10551-016-3317-1>
6. Bhatt, P., & Altinay, L. (2013). How social capital is leveraged in social innovations under resource constraints? *Management Decision*, 51(9), 1772-1792. <https://doi.org/10.1108/MD-01-2013-0041>
7. Bloom, P. N., & Smith, B. R. (2010). Identifying the drivers of social entrepreneurial impact: Theoretical development and an exploratory empirical test of SCALERS. *Journal of Social Entrepreneurship*, 1(1), 126-145. <https://doi.org/10.1080/19420670903458042>
8. Boddewyn, J. J., & Brewer, T. L. (1994). International-business political behavior: New theoretical directions. *Academy of management review*, 19(1), 119-143.
9. Boncler, J., & Rispal, M. H. (2004). L'entrepreneuriat en milieu solidaire : un phénomène singulier ? *Revue de l'Entrepreneuriat*, 3(1), 21. <https://doi.org/10.3917/entre.031.0021>
10. Boschee, J. (1998). Merging Mission and Money: A Board Member's Guide to Social Entrepreneurship. *The National Center for Nonprofit Boards*, 1-12.
11. Boschee, J. (2001). Eight basic principles for nonprofit entrepreneurs.

- Nonprofit World, 19(4), 15-18.
12. Braunerhjelm, P., & Hamilton, U. S. (2012). Social entrepreneurship a survey of current research. In Swedish Entrepreneurship Forum (Número 09).
 13. Chunlei, W., Zhaowen, D., & Larry, Y. (2016). From nonprofit organization to social enterprise: The paths and future of a Chinese social enterprise in the tourism field. *International Journal of Contemporary Hospitality Management*, 28(6), 1287-1306. <https://doi.org/10.1108/IJCHM-05-2014-0230>
 14. Da Silva, S. B., & Bitencourt, C. C. (2018). Towards a Social-Resource-Based View (SRBV). *Mega Journal of Business Research*, 2018.
 15. Dart, R. (2004). Being “business-like” in a nonprofit organization: A grounded and inductive typology. *Nonprofit and voluntary sector quarterly*, 33(2), 290-310.
 16. De Winne, S., & Sels, L. (2010). Interrelationships between human capital, HRM and innovation in Belgian start-ups aiming at an innovation strategy. *The International Journal of Human Resource Management*, 21(11), 1863-1883.
 17. Dees, J. G., Emerson, J., & Economy, P. (2002). *Enterprising nonprofits: A toolkit for social entrepreneurs* (Vol. 186). John Wiley & Sons.
 18. Defourny, J., & Nyssens, M. (2010a). Conceptions of social enterprise and social entrepreneurship in Europe and the United States: Convergences and divergences. *Journal of social entrepreneurship*, 1(1), 32-53.
 19. Defourny, J., & Nyssens, M. (2010b). Social enterprise in Europe: At the crossroads of market, public policies and third sector. *Policy and Society*, 29(3), 231-242. <https://doi.org/10.1016/j.polsoc.2010.07.002>
 20. Di Domenico, M., Haugh, H., & Tracey, P. (2010). Social bricolage: Theorizing social value creation in social enterprises. *Entrepreneurship theory and practice*, 34(4), 681-703.
 21. Di Zhang, D., & Swanson, L. A. (2013). Social entrepreneurship in nonprofit organizations: An empirical investigation of the synergy between social and business objectives. *Journal of Nonprofit & Public Sector Marketing*, 25(1), 105-125.
 22. Doherty, B., Haugh, H., & Lyon, F. (2014). Social enterprises as hybrid organizations: A review and research agenda. *International journal of management reviews*, 16(4), 417-436.
 23. Dorado, S. (2006). Social entrepreneurial ventures: different values so different process of creation, no? *Journal of developmental entrepreneurship*, 11(04), 319-343.

24. Ebrahim, A., Battilana, J., & Mair, J. (2014). The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behavior*, 34, 81-100.
25. Erikson, T. (2002). Entrepreneurial capital: the emerging venture's most important asset and competitive advantage. *Journal of business venturing*, 17(3), 275-290.
26. Fourel, C. (2001). *Le goût des autres et le capital social: les enjeux de la nouvelle économie sociale*. La nouvelle économie sociale, efficacité, solidarité, démocratie, sous la direction de C. Fourel, Paris: Syros.
27. Frynas, J. G., Mellahi, K., & Pigman, G. A. (2006). First mover advantages in international business and firm-specific political resources. *Strategic Management Journal*, 27(4), 321-345.
28. Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California management review*, 33(3), 114-135.
29. Gras, D., & Mendoza-Abarca, K. I. (2014). Risky business? The survival implications of exploiting commercial opportunities by nonprofits. *Journal of Business Venturing*, 29(3), 392-404. <https://doi.org/10.1016/j.jbusvent.2013.05.003>
30. Hillgren, P. A., Seravalli, A., & Emilson, A. (2011). Prototyping and infrastructuring in design for social innovation. *CoDesign*, 7(3-4), 169-183. <https://doi.org/10.1080/15710882.2011.630474>
31. Jiao, H. (2011). A conceptual model for social entrepreneurship directed toward social impact on society. *Social Enterprise Journal*, 7(2), 130-149. <https://doi.org/10.1108/17508611111156600>
32. Kamdem, E. (2016). *Innovation entrepreneuriale et développement durable en Afrique : défis et opportunités*. Editions L'Harmattan.
33. Kickul, J., & Lyons, T. S. (2015). Financing social enterprises. *Entrepreneurship Research Journal*, 5(2), 83-85.
34. Kramer, M. R. (2005). *Measuring innovation: Evaluation in the field of social entrepreneurship*. Skoll Foundation, Boston, MA: Foundation Strategy Group.
35. Liu, G., Eng, T., & Takeda, S. (2015). An investigation of marketing capabilities and social enterprise performance in the UK and Japan. *Entrepreneurship Theory and Practice*, 39(2), 267-298.
36. London, T. (2008). The base-of-the-pyramid perspective: A new approach to poverty alleviation. *Academy of management proceedings*, 2008(1), 1-6.
37. Lumpkin, G. T., Moss, T. W., Gras, D. M., Kato, S., & Amezcua, A. S. (2013). Entrepreneurial processes in social contexts: How are they different, if at all? *Small Business Economics*. <https://doi.org/10.1007/s11187-011-9399-3>

38. Macko, A., & Tyszka, T. (2009). Entrepreneurship and risk taking. *Applied psychology*, 58(3), 469-487.
39. Mair, J., & Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36-44. <https://doi.org/10.1016/j.jwb.2005.09.002>
40. Mair, J., & Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. *Social entrepreneurship*, 121-135.
41. Massarsky, C. W. (2006). Coming of age: Social enterprise reaches its tipping point. In *Research on Social Entrepreneurship* (p. 67-88).
42. Meyskens, M., Robb-Post, C., Stamp, J. A., Carsrud, A. L., & Reynolds, P. D. (2010). Social ventures from a resource-based perspective: An exploratory study assessing global Ashoka fellows. *Entrepreneurship theory and practice*, 34(4), 661-680.
43. Moizer, J., & Tracey, P. (2010). Strategy making in social enterprise: The role of resource allocation and its effects on organizational sustainability. *Systems research and behavioral science*, 27(3), 252-266.
44. Mort, G., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: Towards conceptualisation. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1), 76-88.
45. Mubita, A., Libati, M., & Mulonda, M. (2017). The importance and limitations of participation in development projects and programmes. *European scientific journal*, 13(5), 238-251.
46. Nicholls, A. (2006). *Social Entrepreneurship New Models of Sustainable Social Change*.
47. Nyssens, M. (2006). Social enterprises at the crossroads of markets, public policies and civil society. In *Routledge Studies in the Management of Voluntary and Non-Profit Organizations*. <https://doi.org/10.1007/s13398-014-0173-7.2>
48. Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41(1), 56-65. <https://doi.org/https://doi.org/10.1016/j.jwb.2005.10.007>
49. Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford University Press.
50. Renko, M. (2013). Early challenges of nascent social entrepreneurs. *Entrepreneurship: Theory and Practice*, 37(5), 1045-1069. <https://doi.org/10.1111/j.1540-6520.2012.00522.x>
51. Rodrigo-Alarcón, J., García-Villaverde, P. M., Ruiz-Ortega, M. J., & Parra-Requena, G. (2018). From social capital to entrepreneurial orientation: The mediating role of dynamic capabilities. *European*

- Management Journal, 36(2), 195-209.
<https://doi.org/10.1016/j.emj.2017.02.006>
52. Rollin, J., & Vincent, V. (2007). Acteurs et processus d'innovation sociale au Québec. Réseau québécois en innovation sociale.
 53. Santos, F. M. (2012). A positive theory of social entrepreneurship. *Journal of business ethics*, 111(3), 335-351.
 54. Sanzo, M. J., Álvarez, L. I., Rey, M., & García, N. (2015). Business–nonprofit partnerships: a new form of collaboration in a corporate responsibility and social innovation context. *Service Business*, 9(4), 611-636. <https://doi.org/10.1007/s11628-014-0242-1>
 55. Sharir, M., & Lerner, M. (2006). Gauging the success of social ventures initiated by individual social entrepreneurs. *Journal of world business*, 41(1), 6-20.
 56. Smith, R., Bell, R., & Watts, H. (2014). Personality trait differences between traditional and social entrepreneurs. *Social Enterprise Journal*.
 57. Snow, D. A., Soule, S. A., & Kriesi, H. (2008). *The Blackwell companion to social movements*. John Wiley & Sons.
 58. Thompson, J. L. (2002). The world of the social entrepreneur. *International journal of public sector management*.
 59. United Nations. (2003). *Handbook on non-profit institutions in the system of national accounts: Vol. No. 91 (Numéro Series F)*. United Nations Publications.
 60. Valéau, P., & Boncler, J. (2012). Les acteurs du monde associatif face aux différentes propositions de l'entrepreneuriat social: du scepticisme à une adoption conditionnelle. *RIMHE: Revue Interdisciplinaire Management, Homme Entreprise*, 3, 17-35.
 61. Van Ryzin, G. G., Grossman, S., DiPadova-Stocks, L., & Bergrud, E. (2009). Portrait of the social entrepreneur: Statistical evidence from a US panel. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 20(2), 129-140.
 62. Weber, C., Kröger, A., & Lambrich, K. (2012). Scaling social enterprises- A theoretically grounded framework. *Frontiers of Entrepreneurship Research*, 32(19).
 63. Weerawardena, J., & Mort, G. S. (2006). Investigating social entrepreneurship: A multidimensional model. *Journal of world business*, 41(1), 21-35.
 64. Zahra, S. A., Newey, L. R., & Li, Y. (2014). On the frontiers: The implications of social entrepreneurship for international entrepreneurship. *Entrepreneurship theory and practice*, 38(1), 137-158.



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Corporate Governance, Capital Structure, Ownership Structure, And Corporate Value Of Companies Listed At The Nairobi Securities Exchange

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Abstract

This paper focuses on establishing the relationship among corporate governance, capital structure, ownership structure, and firm value for companies listed at the Nairobi Security Exchange (NSE). The study tested three hypotheses that explored various aspects of this relationship: First, there is no intervening effect on the capital structure on the relationship between corporate governance and corporate value; Second, there is no significant moderating effect of ownership structure on the relationship between corporate governance and corporate value; and finally, there is no significant joint effect of corporate governance, capital structure, and ownership structure on corporate value. The data of the study was obtained from audited financial statements of the firms listed at the NSE. A census survey for sixty-four publicly trading firms at the NSE was undertaken. The data of 64 corporations was cleaned, leaving a smaller number of 58 firms which formed over 90% of the sample. The analysis covered a five-year period between 2013 to 2017. The study adopted a positivism philosophy and a descriptive design. Descriptive statistics and diagnostic tests were undertaken and thereafter

inferential statistics, specifically correlation and regression analysis, were used for hypothesis testing. The multiple regression analysis was used to test the relationship among corporate governance, capital structure, ownership structure, and corporate value. The panel data procedure was considered more appropriate as the sample data contained both cross-sectional and time-series data. The Baron and Kenny's (1986) approach was used to assess the intervening and moderating effect of capital structure and ownership structure respectively on the relationship between corporate governance and corporate value. Corporate Governance was measured by a composite of board independence, board size, board remuneration, and corporate gender diversity. Capital structure was measured by leverage, while ownership structure was measured by ownership concentration, state ownership, family ownership, and foreign ownership. Firm performance was measured using the Tobin Q. The joint effect of corporate governance, capital structure, and ownership structure on corporate value was found to be positive and significant. However, Ownership structure and capital structure had no significant moderating and intervening effects respectively on the relationship between corporate governance and corporate value. This study makes an original contribution as it takes a more holistic approach of corporate governance development by probing whether improving corporate governance is linked to the enhanced corporate value. The study recommends that corporate shareholders, boards, regulators, and management of listed corporations should put in place robust policies. This will ensure the implementation and monitoring of corporate governance principles and ensure congruence in their activities of the oversight of corporate objectives of optimizing corporate value and minimizing fraud and failure risks of corporations.

Keywords: Corporate Governance, Capital Structure, Ownership Structure, Corporate Value, Agency Theory

Introduction

The corporate governance subject has stimulated much empirical research in finance and economics since Smith's (1776) key seminal publication which analyzed the characteristics and sources of wealth among nations. Corporate governance denotes the rules and principles established by the management to regulate affairs and effectively manage the company's resources to add value to the company and achieve maximum returns for shareholders (Haque & Arun, 2016). It is therefore a framework of rules, relationships, systems, and processes that provide a structure for exercising authority, securing financial resources and other resources, and controlling corporations to enable companies create value while providing accountability and control systems to hold actors responsible for their individual and

collective actions. The established structures support value creation through entrepreneurialism, innovativeness, development, and exploration by management and directors while providing incentives to align shareholders and management interests. It involves directing and managing systems, people, and resources, which is an important key in creating value. Studies have documented that the use of functional corporate governance guidelines strengthens investors' confidence in obtaining profits (Alqisie, 2014). Ownership structure forms a central base in the linkage between corporation governance and value as the owners' goal is to maximize their returns by strengthening governance issues. According to Holderness (2016), ownership structure can be influenced greatly by environment such as whether there are high chances of perquisite consumption or not and whether the capital structure imposes adequate pressure on management to increase company's value.

Agency theory is the anchoring theory of the study because it is instrumental in the conceptualization of how firm value interacts with corporate governance. It may result in agency conflicts if the management starts to pursue personal interests conflicting those of the stockholders (Calomiris & Carlson, 2016). It helps us understand the importance of having a strong corporate governance mechanism in firms and how they impact their performance. The theory informs us of the importance of managing the relationship between owners and managers which influences the performance of corporations to a great extent. Thus, the tradeoff model conceptualized the intervening link of capital structure on the relationship between corporate governance and company value. The theory asserts that entities would desire to use debt finance up until the gains arising from tax-shields matches the bankruptcy and financial distress costs. Jensen and Meckling (1976) authored the theory and hypothesized that trade-off scenario exists between an entity's optimal debt-equity ratio and its impact on agency costs, taxes, and bankruptcy costs.

This study aims to establish the cause of corporation's failures and underperformance which have continued to increase in frequency and magnitude at NSE despite different measures instituted by the supervisory authorities like the CMA and the Central Bank. Although the implementation and improvement of corporate governance regulations and principles has made a significant contribution in improving NSE listed firms' performance, the number of cases of underperformance and failure is still increasing (Dominic & Memba, 2015). As such, recently in 2015, the CMA placed Nakummat and Uchumi Supermarkets under statutory management. In addition, Kenya Airways and Mumias sugar - despite several bailout by the Kenyan Government - still continue to experience huge losses. Several authors have ascribed this problem to financial difficulties and inefficient corporate

governance (Peters & Bagshaw, 2014). Latest studies suggest that this deeply mirrors weaknesses in corporate governance, ranging from complacency board in oversight to inadequate controls, and the management's poor strategic foresight (Opiyo, 2013; Vincent et al., 2015).

Corporate governance, capital structure, and ownership structure are key concepts that have been interconnected with corporate value analysis in several existing studies. Agency theory and several other mechanisms of corporate governance contend that good corporate governance enhances entity's performance (Haque & Arun, 2016). The regulatory framework implemented by Capital Market Authority and tight reporting oversight of NSE has been instrumental in improving corporate performance thereby proving their effectiveness to a reasonable extent (M'Ithiria & Musyoki, 2014). Regardless of the various interventions, Kenya has documented several cases of corporate governance weaknesses and poor capital structure practices among listed companies at NSE resulting to receivership/statutory management and liquidation. The number of cases keeps rising, especially at CMC Motors, and consecutive loss reporting by firms such as Kenya Airways and Mumias Sugar is a sign that poor corporate governance practices persist despite these improvements (Ali, 2018).

Corporate governance has been discussed in the context of privately and state-owned entities where corruption, malpractice, and subsidization by the government of failing listed enterprises like Mumias Sugar, Kenya Airways among other firms remain the defining attributes. In 2017 for instance, fashion retailer Deacons (EA) and Cement maker ARM were also placed under statutory management due to excessive losses and high debt.

Numerous studies have been undertaken in industrialized states but the outcome of the studies – even though contradictory in most cases – cannot be unreservedly generalized to emerging states due to societal, cultural, and economic divergences between the developed and developing nations (Carter & Greer, 2013; Chen, 2012; Hasan & Butt, 2009). Other studies have considered individual variables relationships on firm value (Dominic & Memba, 2015). The question is - what is the impact of corporate governance on corporate value of NSE listed companies?

However, the key objective of this research aims to evaluate the relationship among corporate governance, capital structure, ownership structure, and corporate value of NSE listed companies. The specific objectives of the research include the following:

- i. To assess the intervening effect of capital structure on the relationship between corporate governance and corporate value of NSE listed firms.

ii. To investigate the effect of ownership structure on the relationship between corporate governance and corporate value of NSE listed firms.

iii. To evaluate the joint effect of corporate governance, capital structure, and ownership structure on corporate value of NSE listed firms.

Literature Review

Theoretical Framework

Good corporate governance cannot be described by a single theory. Thus, it remains vital to combine different theories that not only address social interactions, but also highlight rules and laws, as well as stringent enforcement, that relate to good practices of governance and go beyond mechanical approaches of explaining CG. For this reason, it is important that the holistic implementation is promoted in the entire corporate world, which brings a different perspective of corporate management with it. Governance in diverse countries can differ based on their political, cultural, historical, and social situations. In such cases, the governance in developing and developed states can differ since it is subject to the economic and cultural perspectives of every state (Wicks & Parmar, 2014). The anchoring theory is agency theory. The other theory considered to compliment agency theory is the trade-off theory. These theories are linked to the study in that they are reflecting the basis of governance practices and how this affects the corporate value.

Agency theory was founded by Jensen and Meckling (1976), and they indicated that the agency theory is instrumental in corporate governance literature, standards, principles, and governance codes. Anderson, Becker, and Campbell (2014) made available an extensive review of CG theories, arguing that an agency model is best since it aptly explains the role of corporate governance towards company performance. When critically examined, agency theory basically deals with the resolution of two problems that arise due to agency relationships (Velte, 2017). The foremost problem occurs when there is a conflict between the agent and principals when their wants or goals conflict, while the second issue occurs when it becomes costly or difficult for a principal to confirm what an agent action. The model postulates that prudent CG mechanisms align executives and directors' interest with the welfare of owners leading to an efficient and optimal capital structure choices which, when combined with ownership structure, leads to better corporate value. In agency relationships, the basic function of independent directors includes, among other things, overseeing management performance in achieving agreed objectives, overseeing performance reporting, and satisfying financial integrity, and optimizing resilient and defensible financial controls and capital structure (Mang'anyi, 2011). Thus, effective involvement of directors in

monitoring and supervision of activities and reports of management can greatly improve governance and financial performance.

Agency theory critics argue that it only focuses on different relationships, thus ignoring the convergence of interrelationships among different parties and their interdependencies (Hasan & Butt, 2009). Such parties are distinct in nature and have mutual associations that cannot easily be linked to the theory's divergent viewpoint. Not all agents are self-centred and opportunistic because there are those who act as real ship captains if rewards and compensation are made to their satisfaction. Donaldson and Davies (1994) findings also indicate that where a manager has served in a company for a long time, help shape and mould its form and directions, there is likely to be a melding of individual self-esteem with corporate prestige. Other stakeholders like employees and banks are also likely affected by the appropriation policy of management and may oppose or expose such actions. This theory is of great relevance to this study as it aids in understanding the relationship between the organization management and its owners. It also helps us understand the importance of having strong corporate governance mechanisms in firms and how they impact their performance. Kenya's financial institutions are managed by executives on behalf of shareholders. The agency problems are evident in most scandals that have faced some of the institutions under this study. This theory is thus applicable for this study, as it informs us of the importance of managing this relationship between owners and managers which influences the performance of corporations to a great extent. According to Robbins and Judge (2017), reducing agency tensions results in a friendly working environment and, hence, agency cost is reduced leading to efficient operational, financing, and investing activities.

Trade-off theory argument on the existence of an ideal capital structure that optimizes corporate value will motivate management to implement corporate governance best practices that would enable them to achieve this debt level. The uniqueness of this optimal tax level to the different companies means that investors would prefer investing in corporation with higher optimal level gain accelerated returns both from debt and capital invested. The debt tax benefits and the control of free cash-flow difficulties forces companies to make greater use of leverage which also positively influences management to invest in projects with positive cash flow, thereby optimizing corporate value. Critics of this theory point out that high debts level result in financial distress and bankruptcy and may therefore result in reduction of corporate value. In efficient and perfect markets, Modigliani and Miller (1958) illustrated that the structure of financing was irrelevant in determining the cost of funds and an entity's value, thus contradicting the model. The attainment of ideal capital structure is assumed to be the basis of market efficiency and symmetric information which is not always the reality – this makes it difficult to

operationalize. The relevance of this theory is the ability to support the conceptualization of the intervening impact of capital structure on the interrelationship between CG and corporate value. The theory indicates that businesses will choose their equity and debt financing mix to offset the benefits and costs of debt. High financial leverage may result in improved efficiency by reducing agency costs because of fear of bankruptcy which would result in losses to executives in form of remunerations, incentives, reputation and the pressure to make cash flows to repay periodic debt and interest expenses. The relationship between the right action of management in adherence to good corporate governance, capital structure decision, and their effort to optimize corporate value to wade-off bankruptcy helps to conceptualize the relationship, thereby predicting the intervening effect of capital structure on the relation between CG and corporate value.

Corporate Governance, Capital Structure, Ownership Structure, and Company Value

The empirical analysis of the relationship among corporate governance, capital structure, ownership structure, and corporate value has not provided an explicit causal link amongst the variables. Majority of previous studies pose methodological, theoretical, and contextual gaps. The agency theory argues that control and ownership separation create conflicting interests whereas in trade-off theory, no such conflicts are envisaged. Most of the earlier studies reviewed have investigated the interrelationships between the two or the three variables and documented conflicting and inconclusive results.

Adera et al. (2015) examined the link between debt-equity ratio and stock values of NSE manufacturing companies. They applied the explanatory nonexperimental design with the authors undertaking a census of nine entities. Pearson Correlation - (2-tailed) Pearson analysis - was employed. The outcomes documented a significant positive association between preference share capital, long-term leverage, reserves, ordinary equity and the firm's performance. The research did not consider moderating variables on the relationship nor the corporate governance influence in the relationship. Recent empirical research shows that implementation of the best practices of corporate governance remains a challenge for quoted Kenyan companies and regionally. These best practices include shareholders rights protection, clear definition of stakeholder roles as well as defining board responsibilities for optimizing company value. Providing an answer to this gap is foundational and fundamental in ensuring optimal corporate growth and performance which is the need for the current study.

Driffield, Mahambare, and Pal (2005) studied whether ownership structure affects debt-equity ratio and ROA. They applied firm-level panel

data 3rd level least square method (3SLS) method. They obtained evidence from the popular belief that bureaucratic controls hamper the growth of firm value. It is possible to extend this study to include mediating influence of capital structure on corporate value and governance aspects and note the resulting changes in results.

Hasan and Butt (2009) examined how corporate governance and ownership structure affected Pakistani listed companies' capital structure. The study adopted fixed-effect regression technique. The findings show that ownership structure and corporate governance had a significant effect on the capital structure. If the study were to be taken one step further by corporate value, the results would be more robust. The main objective of the shareholder is to optimize returns on investment. Therefore, extending the study to include corporate governance would provide the necessary focus and attention to shareholders key objective. This gap was therefore adequately responded to by the current study which has recognized agency theory as the anchoring theory and focused on investigating how the gap between ownership and control can be minimized to optimize shareholders value creation.

Holderness (2016) investigated how ownership structure and debt-equity ratio affects entity's performance in his study of Vietnamese quoted corporations. The study employed OLS and regression methods for the data analysis. The study documented an adverse effect of foreign ownership on leverage, but a positive effect by state ownership. The study considered ownership structure and debt-equity ratio combine effect on firm performance but did not consider the moderating influence of ownership structure nor the intervening impacts of debt-equity on firm performance which this study has now incorporated. There is, however, a need to incorporate a variable that would address the often-sighted need for taking adequate measures to boost the proficiency and efficiency of governance structure in firms.

Studies relating to corporate governance and business performance have yielded contradictory and inconclusive outcomes. Some studies documented positive relationships, while others reported either negative or no relationships at all. A possible explanation for the contradictions and conflicts could be the exclusion of intervening and moderating effects. However, the studies use different measure of the explanatory and response variables in addition to methodological differences. Most of the studies on the four concepts have been undertaken in developed markets that vary due to market efficiencies, regulatory as well as legal environments. Furthermore, limited studies have evaluated the intervention and moderation effects of capital structure and ownership structure at the same time. Given the methodological and the contextual gaps, the inconsistent and sometimes inconclusive findings, this is a research area which needs current and future investigation. The above analysis leads to the three hypotheses tested by the study.

Hypothesis 1: There is no significant intervening effect of capital structure on the relationship between corporate governance and corporate value of NSE listed firms.

Hypothesis 2: There is no significant moderating effect of ownership structure on the relationship between corporate governance and corporate value of NSE listed firms.

Hypothesis 3: There is no significant joint effect of corporate governance, capital structure, and ownership structure on corporate value of NSE listed firms.

The Conceptual Framework

Figure 1 displays the study's conceptual model showing corporate governance, capital structure, ownership structure, and corporate value interrelationships. The figure depicts that CG influences corporate value in several ways. Corporate governance can affect corporate value indirectly through capital structure. The directors hired by the firm owners during General Meetings do not participate in the normal operating activities of the company, but rather oversee the management's activities and approve critical decisions of the management in the company. One of the key decision management makes, which requires the director's approval, is the capital structure decision. Hypothesis one, therefore, proposes the intervening effect of capital structure on the relationship between CG and corporate value. Both Trade-off theory and agency theory supports this hypothesis.

Corporate Governance could also influence corporate value through the moderation of the ownership structure. The directors are the link between the management and the owners, and they provide the owners with information regarding management strategies approved by them or suggested by the management. In addition, they receive direction from the owners on fundamental strategic changes as well as visions, mission, and key objectives. Ownership structure has been documented based on empirical studies to influence entity value, although the direction and nature of the effect are not clear. The common ownership structure attributes are ownership concentration, foreign, state, and family ownerships. Hypothesis two, therefore, proposes that ownership structure moderates the relationship between CG and firm value. This hypothesis is supported by agency theory – relating to agency costs resulting from the separation of control from ownership as agents take charge of the firm. Corporate governance, capital structure, and ownership structure could jointly affect corporate performance. From past empirical studies, each of these variables has been documented by scholars to have some effect (positive, negative, or none) on corporate value. The joint effect of the variables has also been investigated by few scholars. Consequently, the third hypothesis assessed the joint influence of corporate

governance, capital structure, and ownership structure on corporate value and is supported by both agency theory and trade-off theory.

Participants in the age group between 51 and 80 show higher cognitive and behavioral values. The following table shows the scores of general attitudes concerning age groups. Table 6 indicates the values of the correlation analysis.

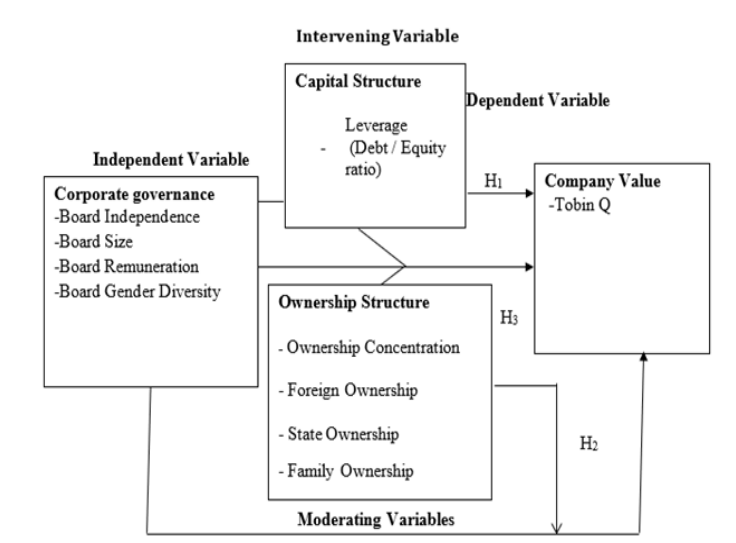


Figure 1. The Conceptual Model
Source: Author (2021)

Research Methodology

The methodology steps adopted by the study include research philosophy, study design, targeted population, collection of data, diagnostic tests, operationalization, and analysis of data. The study was premised on the positivism research philosophy as it tested several quantitative hypotheses. The descriptive design was appropriate since the study's key variables were defined and the study hypotheses and research questions were clearly indicated. Cooper and Schidler (2008) supported this position by arguing that descriptive design is suitable for a research in which research questions or hypotheses have already been formulated. The population consists of 58 firms listed at the NSE covering 2013 to 2017. This study used quantitative secondary data collected in Microsoft excel for a five-year period. The data was obtained from publicly trading companies past financial accounts from the companies' websites and other accounts filed with NSE. Where the required data was not accessible, it was directly requested from firms' management.

Various diagnostic tests were undertaken to validate and justify the regression results to determine if the regression model was unbiased. These were done given that it is impractical to achieve accurate and reliable

deductions about reality when the population which the sample was derived from is invalid (Creswell, 2013). The conventional linear regression model is founded on various assumptions including linearity, multivariate normality, little or no multicollinearity, homoscedasticity, and no or little autocorrelation. Autocorrelation arises when residuals fail to be independent of one another and the Durbin-Watson (1985) statistics ($1.5 < d < 2.5$) was employed to assess panel data autocorrelation. The ANOVA linearity test was employed to assess the study variables linearity with non-linearity being insignificant if the computed F-value of the non-linear indicator is more than 0.05. Multicollinearity arises when explanatory variables are not independent from the other, which indicates that one explanatory variable can be linearly predicted by the other variables with some degree of accuracy (Kothari, 2004). Multicollinearity was evaluated through the VIF (Tolerance) test. Multicollinearities exist if the VIF value is more than 10 and the tolerance value is not far from 1. Heteroscedasticity occurs when the residuals variance fails to be constant across all observations and was assessed using the Levene's test. Here, the assumption that the variations in the populations from which different samples were taken were the same was assessed. Linear regression analysis also requires the study variables to be multivariate normal. The Kolmogorov-Smirnov test and goodness-of-fit test was used for testing normality. Additionally, the Shapiro-Wilk test (1965) was also adopted since it is a more robust normality test.

Since the variables in a regression model contain time series, it is essential to undertake a stationary time series test to ensure the model is not biased. A stationarity test is undertaken since nonstationary variables in regression model shows that the asymptotic analysis assumptions are not valid. Thus, the normal "t-ratios" do not follow the t-distribution and therefore cannot validly test the regression parameter hypotheses. The Augmented Dickey-Fuller (ADF) unit root test was undertaken in EXLTAT to assess for non-stationary. According to Gujarati (2003), if a time series is nonstationary, the study of its behavior is valid only for the time under consideration.

The Hausman specification test was also undertaken to determine model suitability. The equations testing the various hypothesis can be estimated using different regression models, specifically the pooled-ordinary (OLS) least square, fixed effects or random effect models. Wooldridge (2010) postulates that pooled OLS is used when a different sample is selected for each year. However, in this case, the same sample is observed within a five-year period. Therefore, choice can be made between fixed effect or random effects. Suitability between the fixed and random effect was assessed through the Hausman test. The Hausman specification test posits that the estimates of the random and fixed effects models' do not differ considerably. The Hausman test null hypothesis specifies that the random effects model is applicable while

the alternative hypothesis indicates that the fixed effects is more suitable. The Hausman test results follows the chi-square distribution. If it is lesser than the probability value, the null hypothesis is rejected, and the fixed effect model is better suited for the panel data. Wooldridge (2010) posits that if the Chi-square P-value is significant statistically ($p < 0.05$), the fixed effects model is preferred. The opposite is recommending the random effects model.

The study adopted a census survey method where the total population of all corporations, publicly trading at the NSE numbering 64 as at December 2017, were considered. However, the data from the 64 companies was sorted and cleaned, while complete data was obtained from 58 corporations as some companies had been delisted and fused with the private sector, new listings, and the loss of observations in other companies due to data unavailability and poor-quality data in some years. These 58 companies with complete data comprised of more than 90% of the sample.

Beck and Wiersema (2013) explains that operationalization is the categorical description of a variable so that it can be measured. The four variables of the study were Corporate Governance, Capital Structure, Ownership Structure, and Corporate Value. Corporate Governance indicators included board independence (the proportion of autonomous non-executive members of the board), board size (logarithm of number of directors), board remuneration (natural log of payout to board members per year), and board gender diversity (proportion of female directors). That was in line with the measures adopted by Proudfoot (2016). In addition, equal weighted composite consisting of the four sub indicators (Board Independence, Board Size, Board Remuneration and Board Gender Diversity) formed the Corporate Governance measure. Capital structure was proxied by the leverage (proportion of debt to the total funding). Ownership structure was measured by the weighted average of ownership concentration (proportion of shareholders with 10% or more to the aggregate shareholding value), State ownership (Proportion of state ownership to aggregate ownership), foreign ownership (Proportion of foreign ownership to aggregate ownership), and family ownership (Proportion of family ownership to total ownership).

Consequently, the corporate value was measured by an equal weighted average of Tobin Q, while Tobin Q was measured as shown below:

$$TQ = \frac{MVE + BVD}{BVA}$$

Where MVE is Market value of Equity, BVD is Book Value of Debt, and BVA is Book Value of Asset.

Data Analysis

Sekaran and Bougie (2009) suggested a four-step approach for analyzing data, namely: preparing data for analysis (editing for accuracy,

completeness, and consistency); get an overview of the data (descriptive statistics); assess the goodness of fit (diagnostic tests); and finally, test the hypotheses. Multiple regression analysis was used to test the variables strength and direction. The Statistical Program for Social Sciences (SPSS) version 26 was used to analyze the data through descriptive and inferential statistics. This analysis is in line with the analysis used in earlier studies to examine the main effect, intervention, moderation, and joint effect (Okiro, 2014; Mang’unyi, 2011).

To determine the intervening impact of Capital Structure on the Relationship between Corporate Governance and Corporate Value, the four steps approach demonstrated by Baron and Kenny (1986) was applied to test hypothesis one.

$$\text{Step 1: } CV_{it} = \beta_0 + \beta_1 CG_{it} + \varepsilon_{it} \text{-----(1)}$$

$$\text{Step 2: } CS_{it} = \beta_0 + \beta_1 CG_{it} + \varepsilon_{it} \text{-----(2)}$$

$$\text{Step 3: } CV_{it} = \beta_0 + \beta_1 CS_{it} + \varepsilon_{it} \text{-----(3)}$$

$$\text{Step 4: } CV_{it} = \alpha + \beta_1 CG_{it} + \beta_2 CS_{it} + \varepsilon_{it} \text{-----(4)}$$

Where CV, CG, and CS are Corporate Value, Corporate Governance, Capital Structure respectively, and β_0 is the intercept or Constant. β_1 - β_2 are regression coefficient, ε is a random error term, i is the number of companies used in the sample, and t are the duration of the research. Corporate Value was measured by Tobin Q, while Corporate Governance is a weighted average of BI, BS, BR, and BGD.

To test the moderating effect of the ownership structure on the relationship between Corporate Governance and Corporate Value, the Baron and Kenny’s (1986) approach for testing moderation was used. It entailed the moderating impact of ownership Structure on the relationship between Corporate Governance (CG) and the company’s value (CV). Here, Ownership Structure is the weighted average of Ownership Concentration, Foreign Ownership, State Ownership, and Family Ownership. The models for the hypothesis of Ownership Structure are as follows:

$$CV_{it} = \beta_0 + \beta_1 CG_{it} + \beta_2 OS_{it} + \beta_3 CGOS_{it} + \varepsilon_{it} \text{-----(5)}$$

To determine the joint effect of corporate governance, capital structure, and ownership structure on the company’s value, the model for testing the hypothesis is as follows:

$$CV_{it} = \beta_0 + \beta_1 BI_{it} + \beta_2 BS_{it} + \beta_3 BR_{it} + \beta_4 BGD_{it} + \beta_5 CS_{it} + \beta_6 OC_{it} + \beta_7 FRO_{it} + \beta_8 SO_{it} + \beta_9 FMO_{it} + \varepsilon_{it} \text{---(1)}$$

β_1 ----- β_9 are the regression coefficients. BI, BS, BR, BGD, CS, OC, FRO, SO, FMO are Board Independence, Board Size, Board Remuneration, Board Gender Diversity, Capital Structure, Ownership Concentration, Foreign Ownership, State Ownership, and Family Ownership, respectively. CV represents Corporate Value (measured by Tobin Q), β_0 is the intercept or Constant, β_1 - β_9 are regression coefficient, ε is a random error term that

accounts for the unexplained variations, *i* is the number of companies used in the sample, and *t* are the duration of the research.

Descriptive Statistics

Descriptive statistics tools were employed to summarize the basic features of the data, which were collected by providing refined sample summaries and the adopted measures. Sekaran and Bougie (2009) contend that along with simple graphical analysis, descriptive analysis virtually forms the basis of every quantitative analysis of data. Descriptive statistics entails various measures and among them include maximum, minimum, mean, and standard errors of estimates. It further entails measures of symmetry such as skewness and kurtosis (data flatness or sharpness). The descriptive statistics results for all studied variables and the number of observations (*N*) are presented in Table 1 below.

Table 1. Summary of Descriptive Statistics

Variable		Min	Max	Mean	Standard Deviation	Skewness	Kurtosis
Corporate Governance	Board Independence	.55154	.85967	.6155420	.13845227	-.613	-.131
	Board Size	.5485	1.1855	.8428597	.17567500	-1.147	.787
	Board Remuneration	.34210	1.4480	.5551251	.14274991	-.326	-.678
	Board Gender Diversity	.01058	.62033	.2538652	.08718682	-.300	1.441
Ownership Structure	Ownership Concentration	.03597	.68459	.3317542	.14773027	-.028	-.959
	Foreign Ownership	.01705	.68346	.3361216	.12877942	-.318	-.316
	State Ownership	.2511	.78320	.1134344	.05277976	.257	-.243
	Family Ownership	.011052	.73765	.4521073	.16858353	-.750	.005
Capital Structure	Leverage	.02490	.86843	.4035326	.18608898	.278	-.562

Source: Research Findings

Using data from 58 listed companies over a five-year period led to 290 data points (Table 1). Therefore, the findings indicate that the independent directors of the Kenyan listed companies made up 61.5% of the board size, with a maximum and minimum values of 86% and 55%, which were distributed on both sides of the average by 13.8% respectively. The results also showed that the companies had an average board size of 7 directors (antilog of 0.8428), with a maximum of 16 (antilog of 1.1855) directors, and

a minimum of 4 (antilog of 0.5485) directors that deviated by 2 (antilog differ from .1757) directors on either side of the mean, respectively. On average, the listed firms' board remuneration was 3.6 (antilog of .5551) million Kenyan shillings, a minimum of 2.2 (antilog of .3421) million Kenyan shillings and a maximum of 28 (antilog of 1.4480) million Kenyan shillings that deviate by 1.387 (antilog of .1427) million Kenyan shillings on both sides of the mean. The findings also show that female directors of Kenyan listed corporations constituted 25.4% of the corporate board, with a maximum and minimum of 62% and 10% which were distributed on both sides of the mean by 9% respectively.

Regarding ownership structure, the finding indicated that owners hold 10% and above averaged 33% with a maximum of 68.5% and minimum of 36% distributed on either side of the mean by 14.8% respectively. Foreign Ownership constituted 33.6% with a maximum and minimum of 68.3% and 1.7% that deviate by 12.8% on either side of the mean, respectively. The findings further indicate that state ownership averaged 11.3% with a maximum of 78% and a minimum of 25% spread on either side of the mean by 5.3%. The results of the finding show that Family Ownership constituted 45.2% with a maximum of 73.8% and a minimum of 1.1% that deviate by 16.86% on either mean side. The findings indicate that capital structure use of debt is at 40.3% on average with a maximum of 86.8% and a minimum of 2.5% spread on either side of the mean by 18.6%. The results also show that CG indicators of Board Independence, Size, Remuneration, and Gender Diversity had negative skewness. Furthermore, they also had negative Kurtosis except for Board Gender Diversity. Ownership Structure indicators of Ownership Concentration, Foreign, State and Family Ownerships, all had negative Skewness except for state ownership. Kurtosis for all of them were negatively skewed except for Family Ownership.

Results of Diagnostic Tests

This section tested the regression model statistical assumptions. Among them include test for independence, homogeneity, linearity, normality, multicollinearity, specification, and stationarity tests. The calculated values and respective thresholds of the four study variables are indicated in Table 2 below:

Table 2. Summary of Diagnostic Tests

	Assumption (Test)	Normality (Shapiro- Wilk)	Linearity (ANOVA)	Independence (Durbin-Watson)	Homogeneity (Levena)	Collinearity (Tolerance)	Specification test (Chi- Square prob.)	Stationarity Test (ADF-test)
Variable	Attribute	P > 0.05	P > 0.05	1.5 < d < 2.5	P > 0.05	VIF 10 Max	P < 0.05	P < 0.05
Corporate Governance	Board Independence	0.4	0.272	2.199	0.845	1.878	0.0001	0.0001
	Board Size	0.324	0.332	2.197	0.619	3.227	0.0001	0.0001
	Board Remuneration	0.24	0.261	2.108	0.365	1.801	0.0001	0.0001
	Board gender diversity	0.26	0.39	2.183	0.418	1.249	0.0001	0.0001
Capital Structure	Liquidity	0.302	0.181	2.157	0.321	1.346	0.0001	0.0001
	Ownership Concentration	0.403	0.183	2.163	0.762	1.488	0.0001	0.0001
Ownership Structure	Foreign Ownership	0.302	0.274	2.232	0.58	1.258	0.0001	0.0001
	State Ownership	0.081	0.261	2.178	0.329	1.202	0.0001	0.0001
	Family Ownership	0.23	0.146	2.224	0.213	1.051	0.0001	0.0001
Corporate Value	Corporate Governance	0.401	0.199	2.183	0.682	1.823	0.0001	0.0001
	Capital Structure	0.302	0.181	2.157	0.321	1.346	0.0001	0.0001

Source: Research Findings

The Shapiro-Wilk test was employed for testing normality due to its ability to identify a deviancy from normality due to either kurtosis, skewness, or both. The results indicate that the calculated p values ($p > 0.05$) were greater than 0.05, which is normality confirmation. The ANOVA linearity test which computes the nonlinear and the linear component of the variables pair was used for linearity testing, with an insignificant F value ($p > 0.05$) indicating linearity. The calculated P values for the linearity test were above 0.05, which confirmed the linear relationship (constant slope) between the dependent variable and the predictor variables.

The independence of errors assumption, which means that the observations are independent, was also assessed using the Durbin-Watson test and the statistic ranges between 1.5 and 2.5. The calculated values ranged from 2.108 to 2.232, which supports the independence of the error assumption. The Levene test was used for homoscedasticity testing. The test was not statistically significant at $\alpha = 0.05$, which confirmed homogeneity. Variance Inflation Factors (VIF) and tolerance (VIF reciprocal) were used for multicollinearity testing. Multicollinearity occurs when the explanatory variables are highly interrelated, thus making it hard to determine the real contribution of each predictor to the variance in the dependent variable. Sekaran and Bougie (2009) posits that the maximum VIF threshold value is 10. The computed tolerance values were all greater than 1. It is reciprocal that the VIF was between one and three, and this was within the recommended threshold.

The specification test proposed by Hausman was applied to select the appropriate panel data analysis method and to test cross-sectional random effect. It compared fixed and random effect models and found a Chi-square p value of 0.0001 which was statistically significant at 1% ($p < 0.05$), thus suggesting the use of the fixed effects model. The Fixed effect through general linear model under univariate regression analysis in SPSS was applied. The

Augmented Dickey-Fuller (ADF)-unit root test was undertaken to assess for non-stationary. Since the computed p-values were less than the P- level alpha ($P < 0.05$), it was therefore concluded that the data was stationary.

Correlation Analysis

Examining the correlation coefficients makes it possible to accept or reject the null hypothesis that correlation does not exist between the study variables. Sekaran and Bougie (2009) indicates that the collinearity degree between two indicators oscillates between +1 and -1. The +1 correlation means that a perfect and positive linear association exists between the variables, thus there is a multicollinearity problem.

Corporate Governance, Capital Structure, Ownership Structure, and Corporate Value association was examined through correlation analysis using the Pearson Product Moment Correlation Coefficient method. Overall, the correlation coefficients were less than the 0.8 thresholds indicating that there was no concern for multicollinearity (Mang’unyi, 2011). Consequently, we fail to reject the null hypothesis that correlation does not exist between the explanatory variables. In this study, the results of the correlations are reported at 0.05 and 0.01 significant levels, which is consistent with other studies such as Alqisie (2014).

The results are shown below:

	Board Independence	Board Size	Board Composition	Board Gender Diversity	Corporate Governance	Ownership Concentration	Foreign Ownership	State Ownership	Family Ownership	Capital Structure	Corporate Value
Board Independence	1	-0.07	-0.38**	0.08	0.47**	0.13*	0.25**	0.08	-0.04	-0.01	0.15*
Board Size	-0.07	1	0.17**	-0.1	0.74**	-0.03	-0.13*	-0.16**	0.05	0.05	-0.06
Board Remuneration	-0.38**	0.17**	1	-0.21**	0.14*	-0.34**	-0.36**	-0.18**	-0.11	0.01	-0.32**
Board Gender Diversity	0.08	-0.1	-0.21**	1	0.29**	0.01	0.01	0	0.1	0.09	-0.06
Corporate Governance	0.47**	0.74**	0.14*	0.29**	1	-0.05	-0.07	-0.14*	0.01	0.07	-0.08
Ownership Concentration	0.13*	-0.03	-0.34**	0.01	-0.05	1	0.31**	0.31**	0.14*	-0.43**	0.36**
Foreign Ownership	0.25**	-0.13*	-0.36**	0.01	-0.07	0.31**	1	0.20**	0.01	-0.21**	0.25**
State Ownership	0.08	-0.16**	-0.18**	0	-0.14*	0.31**	0.20**	1	0.07	-0.32**	0.11
Family Ownership	-0.04	0.05	-0.11	0.1	0.01	0.14*	0.01	0.07**	1	-0.05	0.12*
Capital Structure	-0.01	0.05	0.01	0.09	0.07	-0.43**	-0.21**	-0.32**	-0.05	1	-0.20**
Corporate Value	0.15*	-0.06	-0.32*	-0.06	-0.08	0.36**	0.25**	0.11	0.12*	-0.20**	1

** Correlation is significant at the 0.01 level and * at the 0.05 level.

Source: Research Data

As shown in Table 3 above, positive statistical relationship was noted between Board Independence and Composite Corporate Governance, Ownership Concentration, Foreign Ownership, and Company Value ($r=.47$, $p<0.01$), ($r=.13$, $p<0.05$), ($r=.25$, $p<0.01$), and ($r=.15$, $p<0.05$) respectively. On the other hand, a negative statistical relationship exists between Board Remuneration and Independence ($r=-.38$, $p<0.01$). This means that as board independence increases, Composite Corporate Governance, Ownership Concentration, Foreign Ownership, and Corporate Value also increases. However, an increase in Board Independence results in a decrease in board remuneration as the sum of executive directors with higher pay are expected to decrease as non-executive increases.

Hypothesis Testing and Findings

The first objective aimed at assessing the intervening effect of Capital Structure on the relationship between CG and corporate value of entities trading at NSE. Baron and Kenny’s (1986) approach, which suggests four steps, was undertaken when assessing the intervening effect of a mediating variable and its effect on the explanatory and response variables. The Baron and Kenny’s (1986) approach indicates that the analysis must meet four conditions for the intervention effect to be considered positive. Firstly, a significant relationship must exist between the independent and the dependent variable in the absence of an intervening variable. Secondly, a significant relationship must exist between the independent variable and the mediating variable. Thirdly, a significant relationship must also exist between the intervening variable and the dependent variable. Lastly, in controlling the impact of an intervening variable on a dependent variable, the impact of the independent variable on the dependent variable in the presence of the intervening variable is significant.

The following null hypothesis was tested:

H₁: No significant intervening effect of capital structure on the relationship between corporate governance and corporate value.

Table 4 displays the study results obtained.

Table 4. Regression Results of Corporate Governance (CG), Capital Structure (CS), and Corporate Value (CV)

Variables	β	SE	Std. β	t	R	R ²	Adj-R ²	F
Model 1^a								
Constant	1.11	0.267		4.157**	0.412	0.17	0.039	0.822
CG	-0.654	0.456	-0.097	-1.436				
Model 2^b								
Constant	0.185	0.124		1.488	0.07	0.216	0.019	1.099
CG	0.108	0.212	0.07	0.511				
Model 3^c								
Constant	1.018	0.181		5.614**	0.456	0.208	0.009	1.045
CS	-0.503	0.138	-0.241	-3.64**				
Model 4^d								
Constant	1.202	0.262		4.594**	0.463	0.214	0.013	1.062
CG	-0.6	0.455	-0.089	-1.351				
CS	-0.494	0.138	-238	-3.599**				

Note: *p < 0.05, **p < 0.01

- a. Dependent Variable: Corporate Value
- b. Dependent Variable: Capital Structure
- c. Dependent Variable: Corporate Value
- d. Dependent Variable: Corporate Value

Source: Research Findings

The results shown in the table indicates that Corporate Governance and Capital Structure do not significantly predict Corporate Value. Capital Structure does not predict Corporate Value when Corporate Governance is controlled. Therefore, CS has no significant intervening effect on the relationship between CC and CV. The Baron and Kenny's (1986) rule requires that all the four steps should predict significant relationships between the variables. Therefore, Capital Structure has not intervened in the Relationship between CG and Corporate Value. Thus, the null hypothesis H_1 cannot be rejected.

The output of this study did not indicate the presence of a quantifiable intervening effect between CG, Capital Structure, and Corporate Value. Therefore, the null hypothesis cannot be rejected. This could be described by the fact that in Kenya, the financial system is still considered to be underdeveloped and the significance of debt as an oversight tool - to lower the agency's costs - may not matter. From a firm's standpoint, managers may be conscious of the ineffective debt oversight, allowing them to increase debt to gain more resources to serve their individual interests, stay in control, and not necessarily optimize shareholder wealth. This study findings were supported by results of research done by Mehrabanpour and Miri (2018) on the influence of CG Index on capital costs, risk, and performance. Contrary to this study, some past research has consistently found that value growth is positively impacted by capital structure decisions and corporate governance. Okiro (2014) found a direct and significant mediating impact of capital structure on the relationship between CG and corporate value. Agency theory has demonstrated that CG and Ownership Structure are essential factors to manage the conflicts and costs arising thereof (Stiglbauer, 2011). Capital Structure is a financial and governance tool that regulates the flow of decisions and activities in company management. However, Corporate Governance in isolation significantly affects Corporate Value when mediated by Capital Structure, and there is no significant relationship. This implies that the Capital Structure may not be effective in influencing the Corporate Governance practices adopted by corporations quoted at NSE. This finding is supported by MM Theory which state that in a perfect market, capital structure does not matter. This was also supported by the findings of Saeed, Gull, and Rasheed (2013).

However, Okiro, Aduda, and Omoro (2015) found a significant intervening effect in the relationship. The lack of significant impact of capital structure in the relationship could be expounded by the fact that when corporate governance is strong, efficient independent directors would ensure that the company does not over leverage or under leverage and always act in such a way that corporate value is optimized. Shareholders with concentrated ownership would also keep monitoring the firm’s borrowings as they would be concerned about bankruptcy risk that can expose them. For state-controlled firms, the state would literally dictate the leverage levels and guaranteeing loans. The presence of Gender diversity would also help bring a balance thus minimizing the influence of capital structure. Therefore, this indicates that the Capital Structure may not be effective in influencing the Corporate Governance practices adopted by corporations quoted at NSE.

The second objective of the study assessed the moderating effect of Ownership Structure on the relationship between Corporate Governance and Corporate Value. Also, the study hypothesized that the relationship between Corporate Governance and Corporate Value was not moderated by the Ownership Structure of public trading corporations at NSE. The following hypothesis was tested:

H3: There is no significant moderating effect of Ownership Structure on the Relationship between Corporate Governance and Corporate Value

The moderation effect was assessed through Baron and Kenny’s (1986) approach. This method involves testing the main effects of the explanatory variable (Corporate Governance) on the response variable (Corporate Value), the effect of the moderating variable (Ownership Structure) on the dependent variable (Corporate Value), and the effect of the interacting term between CG and Ownership Structure (CG*OS) on the dependent variable (Corporate Value).

Table 5. Regression Results Corporate Value, Corporate Governance, and Ownership Structure and Interactive Term (CG*OS)

Variables	β	SE	Std. β	t	R	R ²	Adj-R ²	F
Model 1^a					0.457	0.222	0.102	1.98**
Constant	0.876	0.177		4.958**				
CG	-0.394	0.374	-0.058	-1.052				
OS	0.92	0.145	0.349	6.33**				
Model 2^b					0.457	0.231	0.125	1.942**
Constant	0.871	0.182		4.779**				
CG	-0.383	0.387	-0.057	-0.991				
OS	0.92	0.146	0.349	6.319**				
CG*OS	-0.002	0.022	-0.006	-0.107				

Note: *p < 0.05, **p < 0.01

- a. Predictors: (Constant), Corporate Governance, Ownership Structure
- b. Dependent Variable: Corporate Value

Source: Research Data

The full model (Model 2) illustrates that CG, Ownership Structure, and the interactive variable (CG*OS) significantly predicts Corporate Value ($F=1.942$, $p<0.01$, $R^2=.231$ and $Adj-R^2=.125$). Model 2 further indicates that variation in Corporate Value explained by Corporate Governance and Ownership Structure is 23.1% with the inclusion of interactive variables (CG*OS). The test of regression coefficients (β) shows that Ownership Structure ($p<.01$) is statistically significant in Model 1. In the second model, the coefficient (β) of Ownership Structure is statistically significant, while that of Corporate Governance and the interaction term (CG*OS) are not statistically significant. Given that the interaction term was not significant statistically ($p>.05$), the study documents that Ownership Structure has no moderating influence on the relationship between CG and corporate value. Thus, the finding failed to reject the null hypothesis. This can be expounded by the fact that strong corporate governance has already taken care of the interest of the owners, and corporation would perform based on the management compliance with governance requirement regardless of the corporate ownership structure. This could be due to the strong control of listed companies by regulatory authorities, which may not provide enough room for major shareholders, family, foreign owners, and state to influence key decisions.

The overall implication is that Ownership Structure does not moderate the relationship of Corporate Governance and Corporate Value. Therefore, corporations would perform well irrespective of their ownership structure. This is, however, contrary to common assumptions that government control firms cannot compete with other firms as this control would affect their performance and that family and foreign ownership affect performance. It is also possible that since these firms are listed and are under similar regulations and codes of governance to comply with, the influence of ownership on their operation, decision, and performance is minimal and the owners tend to give them the freehand to operate as long as they comply with the best codes of governance. The findings are in line with the study of Rouf and Al-Harun (2011) that found the relationship not to be significant. This was also supported by Sunarsih and Oktaviani (2016) who argued that an insignificant link exists between ownership structure and entity's performance. Several papers have provided a comprehensive survey giving mixed results of relationships (Stiglbauer, 2011; Vinh, 2017; Kumar, 2015).

Ownership Concentration was found unable to moderate the relationship between CG and Corporate Value. This could be due to the strong control of listed companies by regulatory authorities, which may not provide enough room for major shareholders to influence key decisions. The major shareholders also may prefer to give free hand to management to optimize the corporate value when Corporate Governance adoption is strong. Foreign

Ownership did not significantly influence the relationship as they may prefer their ideas to be aligned to the local market dynamics and also give freedom to directors and management to operate. State Ownership influence in the relationship was also not significant as state actors may prefer leaving the running of the entity to appoint management and directors. Family Ownership for listed companies does not significantly affect the relationship between CG and Corporate Value. This is because the directors and Key management are generally family members of trusted confidants who can be relied on to run such companies without the interference of other family members.

Joint Effect of Corporate Governance, Capital Structure, and Ownership Structure on Corporate Value

The study's third objective was to determine the joint effect of CG, Capital Structure, and Ownership Structure on Corporate Value for NSE listed entities. The study further hypothesized that the joint effect of CG, Capital Structure, and Ownership Structure on the Corporate Value of corporations quoted at the NSE was not statistically significant. The following hypothesis was tested:

H3: The joint effect of Corporate Governance, Capital Structure, and Ownership Structure on Corporate Value is not significant.

The hypothesis was tested as follows:

The regression equation was of the form:

$$CV_{it} = \beta_0 + \beta_1 BI_{it} + \beta_2 BS_{it} + \beta_3 BR_{it} + \beta_4 BGD_{it} + \beta_5 CS_{it} + \beta_6 OC_{it} + \beta_7 FRO_{it} + \beta_8 SO_{it} + \beta_9 FMO_{it} + \epsilon_i$$

The results are shown in Table 6 below:

Table 6. Regression Results Corporate Governance, Capital Structure, Ownership Structure, and Corporate Value

Variables	β	SE	Std. β	t	R	R ²	Adj-R ²	F
Model					0.61	0.372	0.186	2.001**
Constant	1.559	0.393		3.963**				
Board Independence	0.065	0.183	0.023	0.356				
Board Size	0.031	0.137	0.014	0.228				
Board Remuneration	-1.81	0.449	-0.399	-4.028**				
Board Gender Diversity	-0.575	0.278	-0.129	-2.069*				
Capital Structure	-0.259	0.144	-0.124	-1.794				
Ownership Concentration	0.607	0.193	0.193	2.624**				
Foreign Ownership	0.17	0.206	0.056	0.827				
State Ownership	-0.316	0.479	-0.043	-0.66				
Family Ownership	0.238	0.137	0.103	1.733				

Note: *p < 0.05, **p < 0.01

a. Predictors: (Constant), Board Independence, Board Size, Board Remuneration, Board Gender Diversity, Capital Structure, Ownership Concentration, Foreign Ownership, State Ownership, and Family Ownership.

b. Dependent Variable: Corporate Value

Source: Research findings

Table 6 demonstrates the findings of the multiple linear regression performed to investigate the joint link between CG, Capital Structure, Ownership Structure, and Corporate Value of corporations quoted at NSE. A significant link between Corporate Governance, Ownership Structure, and value ($F=2.001$, $p<.01$, $R^2=.372$ Adj- $R^2=.186$) was documented. The predictor variables accounted for 37.2% of Corporate Value.

The model coefficients of Board Remuneration, Board Gender Diversity, and Ownership Concentration were statistically significant ($\beta=-1.81$, $p<.01$, $\beta=-.575$, $p<.05$, and $\beta=-.507$, $p<0.1$ respectively), while the rest were not statistically significant. The other independent variables β and p values as indicated in Table 6 were Board Independence ($\beta=.065$, $p>.05$), Board Size ($\beta=-.031$, $p>.05$), Capital Structure ($\beta=-.259$, $p>.05$), Foreign Ownership ($\beta = .17$, $p>.05$), State Ownership ($\beta=-.316$, $p>.05$), and Family Ownership ($\beta=.238$, $p>.05$).

From the findings, the relationships between Corporate Value and Board Independence, Board Size, Capital Structure, Foreign Ownership, State Ownership, and family Ownership were not significant statistically ($p>.05$). The relation between Board Remuneration, Board Gender Diversity and Ownership Concentration were, however, significant statistically ($p<.01$). Since the whole model was statistically significant ($p<.01$), Corporate Governance, Capital Structure, and Ownership Structure jointly had a significant relationship with the Corporate Value of companies listed at the NSE. The hypothesis H3 was therefore rejected. Fixed Effect regression results in Table 6 indicates that the model's coefficients of Board Remuneration, Board Gender Diversity, and ownership concentration were statistically significant. Specifically, the model coefficient of BR shows a negative and significant relationship of 1.8. This means that as remuneration increases, corporate value will decrease by 1.8. Conversely, the coefficient of BGD of -0.575 means that an increase of 1% in Gender diversity would result in a decrease of -.5% in corporate value. The findings indicated that independence and size of the board were significantly associated to corporation value. The agency theory proposes that corporation's managers (agents) tend to consider their own interest, which affects enterprise value. With a bigger board, agency conflicts can be minimized through monitoring. Accordingly, enhanced independence of the board aids in careful monitoring of the agent, which helps increase stakeholder and investors' confidence and thus lead to a robust Corporate Value. The finding suggests that corporations tend to achieve better results when the board and the company make ideal decisions. The study further found a significant and positive effect of ownership concentration on corporate value. This means that there is a clear evidence of existence of an active role in overseeing by large shareholders of the entities listed on the NSE. Similarly, the coefficient of ownership

concentration is positively significant. This infers that large ownership is positively related to corporate value, which is consistent with the findings of Chen (2012). Furthermore, this means that large ownership brings opportunities to the corporation through drive of large shareholder to gather information and actively monitor the firm as well as providing the necessary linkages. The description is reinforced by the agency theory, which suggests that increased firm monitoring, high information sharing, and visibility of management actions/ activities to shareholders reduces agency cost thereby enhancing firm value. An attention-grabbing observation is that in most models, these are some of the key variables used to test agency theories and trade-off theories in majority of the past studies. Nevertheless, they are not significantly and statistically linked to corporate value in the Kenyan Market. Specifically, they include the coefficients of the considered variables in several regressions. This suggests that the agency theory and the trade-off theories are only partly supported in emerging markets like Kenya to explain corporate value.

The negative relationship between Capital Structure and Corporate governance is indicated by the negative coefficient (The leverage coefficient is negative and not significant) of beta in the joint effect model. This is further supported by no intervening effect of capital structure on the relationship between Corporate Governance and Corporate value, which illustrates the robustness of the findings. This could be explained by Rose (2017) who suggested that miscalculating the bankruptcy costs of reorganization or liquidation could result in companies running into more debt than their respective levels. Thus, a high debt ratio would reduce the company value. These findings fail to support majority of the existing theories, which imply the existence of a positive link between capital structure and corporate value but are in concurrence with majority of the studies in unindustrialized nations. The lack of intervening effect of capital structure on the relationship between CG and CV and the absence of relationship between capital structure and corporate value may be explicated by an emerging and transitional market. More so, Kenya has unique features compared to other industrialized countries. In the 1990s, Kenya introduced economic reform majorly on privatization programs, which shifted the centrally planned to a market economy. However, the Kenyan financial sector is still undeveloped and does not provide the necessary funding and monitoring support (Vincent et al., 2015).

The negative relationship between foreign ownership and company value could also be explained by the fact that there is too much control by foreign owners. This, in turn, restricts managers from the freedom of deciding debt level and having local initiative which may end up reducing corporate value. This finding is contrary to most studies which have found a positive

relationship with a justification that foreign ownership is expected to decrease the effect of agency costs resulting from management vested interest and sub optimal decision, which may result in reduced corporate value (Peters & Bagshaw, 2014; Haque, Arun, Dominic & Memba, 2015). This rebuts the expectation that foreign investors can enhance the governance system of firms through enhanced monitoring.

The findings were also consistent with that of Okiro, Aduda, and Omoro (2015), who documented a significant impact of CG and capital structure on the performance of entities quoted at East Africa stock markets. They found a significant joint influence of CG, Capital Structure, and Regulations on corporate performance, but this was inconsistent with this study. They also found a significant mediating effect of capital structure on the relationship between CG and entity's performance and a significant moderating effect of regulation on the relationship.

Furthermore, the presence of the joint and positive relationship indicates that quoted corporations with good Corporate Governance, optimal Capital Structure, and supportive Ownership Structure obtain higher Corporate Value growth. The findings indicated that independence and size of the board were significantly associated to corporation value. The agency theory proposes that corporation's managers (agents) tend to consider their own interest, which affects enterprise value. With a bigger board, monitoring can help minimize the agency conflicts, while enhanced independence of the board ensures that agents are carefully supervised. This will help to increase the confidence of stakeholders and investors, thereby resulting in a robust Tobin-Q. The finding implication is that when the corporate board and Companies make ideal decisions, entities tend to achieve good results. Finally, Corporate Governance, Capital Structure, and Ownership Structure jointly predict Corporate Value. Thus, quoted firms with good Corporate Governance, optimal Capital Structure, and supportive Ownership Structure obtain higher Corporate Value growth.

Conclusion

The study concludes that capital structure does not intervene in the relationship between Corporate Governance and Corporate value. This implies that the Capital Structure may not be effective in influencing the Corporate Governance practices adopted by corporations quoted at NSE. This could further be expounded by the fact that the Kenyan financial system is still considered to be undeveloped and the significance of debt as an oversight tool - to lower the agency's costs - may not matter. From a firm's standpoint, managers may be conscious of the ineffective debt oversight, thereby allowing them to increase debt to gain more resources to serve their individual interests, stay in control, and not necessarily optimize shareholder wealth.

Ownership Concentration was found not to moderate the relationship between CG and Corporate Value. This could be due to the strong control of listed companies by regulatory authorities which may not provide enough room for major shareholders, family, foreign owners, and state to influence key decisions. Finally, Corporate Governance, Capital Structure, and Ownership Structure jointly predict Corporate Value. Thus, quoted firms with good Corporate Governance, optimal Capital Structure, and supportive Ownership Structure obtain higher Corporate Value growth. The findings indicated that independence and size of the board were significantly associated to corporation value. Therefore, the agency theory proposes that corporation's managers (agents) tend to consider their own interest, which affects enterprise value. With a larger board, agency conflicts can be minimized through enhanced oversight, and greater board independence ensures that managers are closely monitored. This, in turn, leads to increased confidence level for stakeholders and investors and a stronger company value is generated. This finding therefore indicates that corporations tend to achieve better results when the board and company make better optimal decisions.

The obtained study results complement the existing knowledge on Corporate Governance, Capital Structure, Ownership Structure, and Corporate Value. The study's contribution to knowledge focused on the intervening effect of Capital Structure on the Relationship between CG and Corporate Value. The direct effect of Capital Structure and Corporate Value has been evaluated by few past studies (Adera et al., 2015; Bokhari & Khan, 2013; Dumont & Svensson, 2014). Most authors have largely explored the direct effects of CG on Corporate Value (Padmanabha & Rathish, 2017; Vincent et al., 2015). The results documented in the past studies have not only been conflicting but also varying. This research provides an assessment of the intervening effect of capital structure on the relationship between CG and company value. In particular, the approach by Baron and Kenney (1986) was used in the analysis to assess intervening relationship. Another contribution to knowledge is that Corporate Governance, Capital Structure, Ownership Structure, and Corporate Value jointly predict Corporate Value. Several existing studies have assessed the relationships among Corporate Governance, Capital Structure, Ownership Structure, and Corporate Value (M'Ithiria & Musyoki, 2014; Holderness, 2016; Okiro, 2014). However, the variables were separately examined or not in a similar combination. Also, the measures of the considered four variables employed in past studies were different and the results were also inconsistent and inconclusive.

This study also makes contribution to the contradictory theories on corporate governance by analyzing empirically the interrelationships among Corporate Governance, capital structure, Ownership structure, and corporate value. This will resolve conflicts in the theories that document contradictory

propositions on the effects of Corporate Governance, capital structure, and ownership on firm performance such as Agency, Stewardship, trade-off and Stakeholder theories. The findings of this study make contribution to practice and policy by improving the understanding of the Corporate Governance mechanisms that influence Corporate Value.

Furthermore, this study contributes to future research by testing empirically the interrelationships among corporate governance, capital structure, ownership structure, and corporate value. The results of the study provide a room for further study of the concepts in Kenya and beyond. Given the cost-benefit tradeoff in adhering to increased governance standards, it remains unclear whether enhanced governance, as replicated in higher compliance, translates to improved business performance. This study also supplements literature on adequacy of rules and regulations. It explicitly assesses exogenous changes in the management structure and reduces the potential problem of endogeneity. The study also used a fixed effect estimate to address endogeneity concerns. It further expands research on how institution-initiated improved governance affects voluntary governance. Most existing studies have concentrated on the market perceived benefits of changing governance. The study approach is a long-run study of real improvements in shareholder wealth.

In addition, the results of this study generate several contributions to policy and practice of the corporate board, management, investor, and regulatory bodies in general. The effects of CG on company value presented in this study have an implication to corporate boards. The fact that an association exists between corporate governance and corporate value shows that the supervisory activities of the board directly influence company value. Properly constituted corporate boards translate into better results, financial performance, and the appreciation of firm value. Effective corporate governance can be seen through committees of the board of directors, and it brings the interests of the representative in line with the interests of the stockholders (principals). The study assists corporate management to appreciate the linkages between board activities, management functions, and Corporate Value of NSE listed firms. The fact that Capital Structure does not intervene in the relationship between Corporate Governance and Corporate Value could be an indicator that Capital Structure is irrelevant in line with the Modigliani theory of capital irrelevance theory. There could therefore be a need to re-evaluate the finance decision criteria of the company to see whether it aims at optimizing corporate value or whether most of the decision do not involve direct funding by the company. The results of this study will also benefit debt securities investors as well as equity investors, who endure risks of companies' failure to meet their contractual obligations by guiding them in the criteria for making lending decision, which is grounded on corporate

governance strength of an entity. The study shows that the link between the CG mechanisms, capital structure and ownership structure lead to better company values that benefit all parties.

The finding also reveal that the Ownership Structure which is a sub variable of shareholdings by the state jointly affects Corporate Value. This suggests that the privatization of public corporations would add value to them. The government should therefore continue and if possible, accelerate the privatization effort which has been ongoing. Companies like Kengen which had been partially privatized previously should be fully privatized, while others such as Kenya Power, consolidated bank, Kenya meat, Mumias Sugar, Kenya airways among others should be fully privatized to improve their performance. Thus, this study is supportive of the current direction that has privatized several state-owned companies. This has gradually enhanced governance in former state-owned companies and has continued to increase their efficiency and value creation.

This study was also grounded on positivism philosophy, and the goal was to empirically test hypotheses so as to confirm or falsify present theories in the area. The research outcomes supplement the theories by establishing interrelationships between the variables. The Jensen and Meckling (1976) agency theory was useful in bringing out the association between the principals and agents. The agent (in this case directors and managers) represents the principal (in this case shareholders) in a certain corporate transaction (oversight and management) and is anticipated to enhance the principal's interests (enhancing firm value through financial performance) without regard to personal interests.

The study findings further emphasize that agency problems arise when the interests of owners (principals) and corporate agents' conflict. Listed companies should therefore look for ways to minimize conflicting situations between the agents and principals as well as capital and ownership structure through a solid corporate policy. Since the Capital Structure does not intervene in the relationship between CG and Corporate Value, the study provides support to agency problems among listed firms at the NSE. As a theoretical contribution, incentives through regulations and monitoring should be provided to managers to direct their decisions (capital structure decisions) in order to realign these decisions to the interest of the principal. Further CG mechanism such as board independence, size, remuneration, and gender diversity of firms quoted at the NSE should be aligned to shareholders' interest.

Another practice recommendation that managers and policymakers can make to significantly impact performance emerge from the key insight, which responded to a key research question. These are the results of a positive and significant combined effect of CG, capital structure, and ownership

structure, which - as the results explain- support the assertion that mismanagement, business failure, corruption, fraud, and poor performance emanate from agency's costs. This is related to the loss of authority, control, and power by the owners to managers (agents) as the businesses grow and become multifaceted. Therefore, it is vital that the board prioritizes the implementation of codes of proper conduct, company laws, corporate governance principles, and other supervisory guidelines. Firms should make sure that board independence is maintained and as well ensure that the size of the board is appropriate to confirm ideal performance and oversight and resources management.

The results of the study also suggested that the oversight role of debt was not significant. This is as a result of the non-significance of intervening effect of capital structure on the relationship between CG and CV as well as the negative coefficient of the capital structure in the joint effect mode. The results also confirm that the agency's theory supposition that a conflict of interest exists between investors and managers due to information asymmetries and poorly developed financial system. Therefore, there is a need for greater transparency and information availability in the marketplace and additional regulation must be considered.

Family (which dominates concentrated ownership cases) and foreigners as ultimate shareholders jointly affect investment performance. Incentives should be put in place to attract foreign shareholders to buy more shares in listed companies. Corporate governance principles targeting family majority owned units should also be developed to enhance their governance and controls.

The interests of all stakeholders should always be protected and stimulated to take part in corporate governance processes. Another recommendation for practice is that financial market analysts and investors can apply the study to bring sound regulation in financial markets. Here, the analysts promote firms that have adopted optimally corporate codes of good practice by highlighting their performance and availing information to regulatory bodies and potential investors. The investors should also prefer to invest mostly in well-governed firms. Regulators based information provided by the analysts and firms' personal reports should then ensure compliance adherence. Management should be interested in implementing regulations and controls to achieve high profits and maximum shareholders' capital.

In addition, this study provides regulators with a foundation for strengthening codes of conduct, laws, and regulations, and fully adopting corporate governance principles by publicly traded companies in order to maximize growth in company value. This would permit the regulators to implement the best structure that provides a plan for diversification into other countries and regions with well-defined guidelines and reporting functions

that meet the expectations of the Board and shareholders. An excellent relationship should be established between the board, management, and other stakeholders, which can be achieved through regular consultations so that all stakeholders can work together.

Another actionable policy was revealed through the finding that when companies have bigger boards, they post good performance. Bigger boards give professional managers more freedom to exercise judgment and help create additional space for new knowledge. This could also mean more space to bring in different stakeholders within the dominant ownership, to draw on professional skills, and to permit access to a broader range of knowledge and possibly accessibility to wide range of individual and family networks. Listed firms with small boards or less diverse boards should consider expanding their board membership to include gender balance, specialized skills, more resourceful board members, people with political funding, and other needed connections among others. The findings of previous studies have recommended the board size to be between 6 and 9. However, this should be determined by the size, complexity, and the technicality of the company in question (Alqisie, 2014; Velte, 2017; Eyenubo, 2013; Proudfoot, 2016).

Although the study answered the proposed question and provided insights on the effect of Corporate Governance on Corporate Value, as well as intervening and moderating effect of capital structure and ownership structure respectively on corporate value, it still contains some limitation. One of such limitation is that the data collection period is relatively short. The observations span for only five years, from 2013 to 2017, and this may not be long enough because the market and government issues keep changing from time to time. The period of data should be longer to make the results more robust and conclusive to justify the dynamic nature of the market and governing laws and regulations.

The study used four attributes of the corporate governance, one attribute of the capital structure, four attributes of the ownership structure, and one attributes of the corporate value. The findings of this study are limited to the adopted attributes. There are other attributes that could affect the tested relationships, but researchers may not be able to use them due to sensitivity/confidentiality of such information. In addition, the investigation encountered obstacles in collecting adequate corporate governance data. This is due to a culture of confidentiality around asset information in Kenya and the lack of strict laws to force all corporations to make available adequate reports. This led to missing data values, which might affect the results reliability.

Examining just one country can be a weakness in applying research results. Although Kenya is a transition and developing state, it is generally debated that sampling several countries produces more persuasive results.

However, Kenya is a case in point while other unindustrialized states may share characteristics and findings like the documented research results. Additionally, the single-country study permitted in-depth investigation that may not be possible in multi-country context.

In this research, the fixed effects model was used to capture common problems such as the unobserved effects, heteroscedasticity, and possible endogeneity issues. It is not definite that all econometric problems have been fully controlled, particularly regarding endogeneity. The reason is that the fixed effect model captures mostly unobserved heterogeneity. The model does not consider the problem of endogeneity caused by measurement errors, inverse causality, and time-invariant endogenous variables that are common in financial research. The study did not also consider the possible reverse relationship where corporate value may influence capital structure adopted by the company. For example, a company that has been profitable in the past and is likely to continue being profitable with plenty of extra cash like Safaricom may not need any outside debt. However, the above documented limitations have not diluted the study quality. The study and its results have made wide-ranging contributions to the obtainable knowledge base in corporate governance, which still offers plenty of room for additional studies.

Further research may consider incorporating the boards' behavioral aspects. Various researchers in industrialized states have lately begun investigating the corporate board's practices by attendance of its actual meetings. Such requires investigation by researchers in emerging countries. Thus, there is a need to move beyond quantitative research, which produces a mixture of results to possibly more qualitative approaches to how it actually works from an insider's perspective. Extending this current research to a more comprehensive study of board decision-making and dynamics would be the beginning of developing a better understanding of corporate governance.

Future researchers could incorporate other measures of performance, both non-financial and financial other than just the Tobin Q. A related study can be replicated in other countries regionally and internationally. This would further validate the findings of the present and forthcoming studies. This should involve expanding the study to other regional markets like COMESA or a more detailed study concentrating on separate market segments at the NSE to identify any variations in the obtained results. Additional or different variables other than corporate governance, capital structure, and ownership structure can also be considered in the future to enrich corporate governance studies generally and deepen understanding even further.

References:

1. Adera, W. O., Anyango, W., & Rotich, G. (2015). Capital structure and corporate performance of manufacturing companies listed in Nairobi

- Securities Exchange. *International Academic Journal of Economics and Finance*, 1 (5), 1-9.
2. Ali, M. (2018). Impact of Corporate Governance on Firm's Financial Performance: A Comparative Study of Developed and Non-Developed Markets. *Journal of Business Management and Economic Research* 2(1), 15-30
 3. Alqisie, A. (2014). Do corporate governance indicators lead the firm to adopt high/low level of financial leverage? Case of Jordan. *Journal of Management Research*, 6, 99-113.
 4. Anderson. E. A., Becker. O.P., & Campbell, H.O. (2014). Insight of corporate governance Theories. *Journal of Business and Management*, 1(1), 52-63.
 5. Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research, conceptual, strategic, and statistical considerations. *Journal Personality and Social Psychology*, 5(6), 173-182.
 6. Bloom, N., Bond, S., & John, Van, J. R. (2001). *Uncertainty and Investment Dynamics*, Stanford University, Centre for Economic Performance and Institute of Fiscal Studies, University of Oxford.
 7. Bokhari, H. W. & Khan, M. A. (2013). The Impact of Capital Structure on Firm's Performance (A Case of Non-Financial Sector of Pakistan). *European Journal of Business and Management* 5(31), 111-137.
 8. Calomiris, C. W. & Carlson, M. (2016). Corporate Governance and Risk Management at Unprotected Banks: National Banks in the 1890s. *Journal of Financial Economics*, 119(3), 512-532.
 9. Carter, S. M. & Greer, C. R. (2013). Strategic leadership: Values, styles, and Organizational performance. *Journal of Leadership & Organizational Studies*, 20, 379-393.
 10. Carty, R. & Weiss, G. (2012). Does CEO duality affect corporate performance? Evidence from the US Banking crisis. *Journal of financial regulation and compliance*, 20 (1) 26-40.
 11. Chen, L. (2012). The effects of ownership structure on firm performance: Evidence from Scandinavian Countries. *Journal of Finance & International business*, 3(8), 18 – 39.
 12. Cooper, C. R. & Schindler, P.S. (2008). *Business Research Methods* 10th edition. Boston: McGraw-Hill.
 13. Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
 14. Dominic, O. O. & Memba, F. (2015). Effect of corporate governance practices on financial performance of public limited companies in Kenya. *International Journal of Management and Commerce Innovations* (3)1, 122-132.

15. Donaldson, L. & Davis, J. H. (1994). Boards and company performance – Research challenge the conventional wisdom, corporate governance. *An International Review*, 2 (3), 65–91.
16. Driffield, N., Mahambare, V., & Pal, S. B. (2005). *How Ownership Structure Affects Capital Structure and Firm Performance? Recent Evidence from East Asia*. Department of Economics and Finance, Brunel University, UK
17. Dumont & Svensson (2014). *Capital Structure and firm performance – A Swedish Public Company*. Bachelor Thesis Business Administration, Handelshogskolan Goteborgs University.
18. Durbin. J. & Watson, G. S. (1951). Testing for serial correlation in least squares regression. II. *Biometrika*, 38, 159–178.
19. Eyenubo, A. S. (2013). The impact of bigger board size on financial performance for firms: the Nigerian experience. *Journal of Research in International Business and Management*, 3(3), 85-90.
20. Gujarati, D. (2003). *Basic Econometrics*. 4th ed. New York: McGraw Hill, 638-640.
21. Hasan, A. & Butt, S.A. (2009). Impact of Ownership Structure and Corporate Governance on Capital Structure of Pakistani Listed Companies. *International Journal of Business and Management*, 4(2), 50-57
22. Haque, F. G. & Arun, T. G. (2016). Corporate governance and financial performance: an emerging economy perspective. *Investment Management and Financial Innovations*, 13(3-1).
23. Holderness, C. G. (2016). Problems Using Aggregate Data to Infer Individual Behavior: Evidence from Law, Finance, and Ownership Concentration. *Critical Finance Review*, 5(1), 1-40.
24. Jensen, M. & Meckling, W. (1976). Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
25. Kothari (2004). *Research Methods: Methods and Techniques*. New Delhi: AGE International.
26. Kumar, J. (2015). *Does Ownership Structure Influence Firm Value? Evidence from India*. Indira Gandhi Institute of Development Research Gen. A. K. Vaidya Marg, Goregaon (East), Mumbai.
27. Mang’unyi, E. E. (2011). *Ownership Structure and Corporate Governance and Its Effects on Performance: A Case of Selected Banks in Kenya*. *International Journal of Business Administration*, 2(3), 2–18.
28. Mehrabanpour, M. R. & Miri Chimeh, F. S. (2018). Impact of Corporate Governance Index on Capital Cost and Corporate Risk. *Empirical Accounting Research*, 7(3), 227-245.
29. M’Ithiria, E. N. & Musyoki, D. (2014). *Corporate governance,*

- ownership structure perspective and firm value: theory, and survey of evidence, *International Journal of Research in Management & Business Studies*, 27, 1-3.
30. Okiro, K. O. (2014). Corporate governance, capital structure, regulatory compliance and performance of firms listed at the East African community securities exchange (Doctoral dissertation, University of Nairobi).
 31. Opiyo, E. (2013). Effects of corporate governance on insider trading A case of listed companies on Nairobi securities exchange. *Prime Journal of business administration and Management* 9(5), 49 – 61.
 32. Padmanabha, R.B. & Rathish, R. (2017). Corporate governance and firm performance in Malaysia. *Corporate Governance: The International Journal of Business in Society*, 17(5): 896-912.
 33. Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.
 34. Peters, G. T. & Bagshaw, K. B. (2014). Corporate governance mechanisms and financial performance of listed firms in Nigeria: a content analysis. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1(2),103-128.
 35. Proudfoot, D. (2016). Board Member: *Res. Organ. Behav.*, 34 (1), 683–695.
 36. Rouf, M. & Al-Harun, A. (2011). Ownership structure and voluntary disclosure in annual reports of Bangladesh. *Pakistan Journal of Commerce and Social Sciences*, 5(1), 129-139.
 37. Rose, C. (2017). The relationship between corporate governance characteristics and credit risk exposure in banks: Implications for financial regulation. *European Journal of Law and Economics*, 43(1), 167-194.
 38. Sekaran, U. & Bougie, R. (2009). *Research Methods for Business: A Skill Building Approach*, (5 th edition). London: John Wiley & Sons Ltd.
 39. Shapiro, S. S. & Wilk, M. B. (1965). An Analysis of Variance Test for Normality (Complete Samples). *Biometrika*, 52, (3 - 4), 591-611.
 40. Stiglbauer, M. (2011). Impact of Capital and Ownership Structure on Corporate Governance and Performance: evidence from an insider system. *Journal of Problems and Perspective in Management*, 9(1), 16-23.
 41. Sunarsih, U. & Oktaviani, K. (2016). Good Corporate Governance in Manufacturing Companies Tax Avoidance. *Etikonomi*, 15(2), 85–96.
 42. Smith, A. (1776). *Wealth of Nations*, (1991 ed.), Amherst, NY: Prometheus books, 324.
 43. Vincent, O. O., K'Obonyo, P. O., Ogotu, M., & Bosire, E. M. (2015).

- Board composition and financial performance: Empirical analysis of companies listed at the Nairobi securities exchange. *International Journal of Economics and Financial Issues*, 5(1), 23-43.
44. Velte, P. (2017). Do women on board of directors have an impact on corporate governance quality and firm performance? A literature reviews. *International Journal of Sustainable Strategic Management*, 5(4), 302-346.
 45. Vinh, N. T. H. (2017). The impact of nonperforming loans on bank profitability and lending behavior: Evidence from Vietnam. *Journal of Economic Development*, 24(3), 27-44.
 46. Wicks, A.C. & Parmar, B. (2014). Stakeholder theory and corporate objective revisited, *Organization Science*, 15 (3), 364-369.
 47. Wooldridge, J. M. (2010). *Econometric Analysis of Cross Section and Panel Data*, MIT Press Books, The MIT Press, edition 2, volume 1, number 0262232588, September.



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Education Inclusive En République Du Bénin : L'expérience Des Apprenants Du Centre De Malentendants De Louho À Porto-Novo

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Résumé

L'objectif du Développement Durable no 4 (ODD4) stipule qu'il faut garantir une éducation de qualité sans exclusion et promouvoir des possibilités d'apprentissage tout au long de la vie pour tous. C'est dans cet esprit que s'inscrit le Centre d'Accueil, d'Éducation et d'Intégration des Sourds (CAEIS) de Louho à Porto-Novo au Bénin. Cette recherche, d'approche méthodologique qualitative, a pour objectif d'explorer les perceptions des acteurs du centre vis-à-vis des apprenants et de l'approche pédagogique innovante et inclusive mise en œuvre pour scolariser les apprenants handicapés auditifs et entendants et d'investiguer les résultats obtenus et les difficultés auxquelles font face les responsables du centre. Des observations de classe, des recherches documentaires dans les archives du centre, des interviews via des focus groups de parents d'apprenants, des questionnaires du centre et des enseignants ont aidé à collecter les données. Les résultats indiquent que les participants reconnaissent que les sourds, malgré leur handicap, peuvent réussir dans tous les domaines de formation et s'épanouir pleinement pour s'insérer dans le tissu social si des dispositions adéquates sont

prises par l'école. L'approche pédagogique innovante conçue et mise en œuvre par les enseignants permet aux apprenants de réussir sur le plan scolaire et parascolaire. Et enfin, malgré les réussites obtenues, des difficultés subsistent comme le défaut de formation et de qualification des enseignants, l'insuffisance de supervision pédagogique, l'absence de soutien de l'Etat et d'autres autorités locales, le retard de paiement des salaires des enseignants et le manque de matériel didactiques adéquat. C'est la raison pour laquelle nous finissons sur des propositions de pérennisation du centre.

Mots clés: Education Inclusive, Handicap Auditif, Perceptions, Défis, République Du Bénin

Inclusive Education In Republic Of Benin : The Experience Of A Center Of Hearing Impaired Children

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Abstract

The sustainable development goal no 4 stipulates that it is necessary to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. It is for that goal that the center of accommodation, education and integration of the deaf (CAEIS) of Louho has been created in Porto-Novo, the capital city of Benin. The objective of this qualitative research method is to explore the perceptions of the actors of the center towards the students and the innovative and inclusive educational approach implemented to teach hearing handicap students and those without hearing problems as well and to investigate their obtained results and difficulties facing the leaders of the center. Classroom observations of teachers, documentary research through the center artifacts, focus groups interviews with students' parents, teachers and management teams were used to collect data. Results showed that participants recognized that deaf people, despite their handicap, can succeed in all training domains and fully light up to insert themselves in the social make up if adequate decisions are taken in school; the innovative teaching approach conceived and implemented by teachers allows their students to succeed in school. In spite of their successes, some difficulties persist such as lack of teachers training, qualified teachers, didactic materials, absence of

educational supervision, support of government and local authorities, delay of payment of teachers' wages. Relevant suggestions have been made for the perpetuation of the center.

Keywords: Inclusive Education, Hearing Handicap, Perceptions, Challenges, Benin Republic

Introduction

Aujourd'hui plus qu'hier, l'école est l'un des maillons les plus déterminants dans le développement du capital humain d'un pays et de la qualité de la vie des citoyens au sein de la société. Elle est conçue et organisée comme une institution qui, à travers ses fonctions sociales, éducatives, psychologiques et pédagogiques, permet de promouvoir l'éducation holistique et l'épanouissement des apprenants. Autrement dit, l'école est le lieu où les jeunes générations viennent acquérir savoir, savoir-faire et savoir-être nécessaires à leur insertion dans la société (Nguéhan, 2007). Ainsi perçue, l'école doit être le cadre indiqué, au même titre que la famille et la communauté, qui accompagne le développement personnel et la socialisation de chacun et de tous. Elle doit permettre à tout apprenant d'acquérir les connaissances nécessaires pour comprendre les phénomènes qui se déroulent autour de lui. Elle doit développer, d'une part, les compétences disciplinaires prescrites dans les différents domaines de formation et, d'autre part, les compétences de vie courante dont il a besoin pour se prendre en charge, s'autogérer, s'adapter au monde et vivre en harmonie au sein de la société (Loi n° 2003-17 du 11 novembre 2003 portant Orientation de l'Education Nationale en République du Bénin, rectifiée par la Loi n°2005-33 du 06 octobre 2005).

Pour assurer le traitement équitable de tous les enfants d'âge scolarisable, l'école doit s'organiser pour satisfaire les besoins spécifiques de chacun, sans aucune exclusion. Cette posture lui permettrait de lutter de manière efficace contre les clivages générateurs de disparités entre les individus et d'œuvrer effectivement pour réussir l'inclusion scolaire des enfants et des adolescents, de manière à leur faciliter, à court et à long termes, une meilleure intégration professionnelle et sociale. C'est dans cette logique que s'est inscrit le Bénin à travers sa Loi fondamentale en 1990 et la Loi d'orientation de l'éducation en 2005. La première dispose que :

La personne humaine est sacrée et inviolable. L'Etat a l'obligation absolue de la respecter et de la protéger. Il lui garantit un plein épanouissement. A cet effet, il assure à ses citoyens l'égal accès à la santé, à l'éducation, à la culture, à l'information, à la formation professionnelle et à l'emploi (Constitution de la République du Bénin, 1990, Art. 8).

Quant à la seconde, elle précise que :

L'école doit permettre à tous d'avoir accès à la culture, à la science, au savoir, au savoir-faire et au savoir-être. Une plus grande attention doit être accordée à l'éducation des jeunes filles, des personnes et enfants en situation difficile, des enfants des zones déshéritées et des groupes vulnérables (Loi n°2003-17 portant Orientation de l'Éducation Nationale en République du Bénin, 2003, Art. 3).

Ces dispositions juridiques sont en phase avec les résolutions adoptées par le Bénin au plan international, dont la Conférence Mondiale sur l'Education Pour Tous à Jomtien en Thaïlande (UNESCO, 1990) et le Forum Mondial sur l'Education à Dakar au Sénégal (UNESCO, 2000, 2015). Dans leurs prescriptions, ces textes réaffirment, chacun, le droit de tout être humain à l'éducation et la nécessité de la généraliser à toutes les couches sociales sans aucune distinction : « *Assurer une éducation équitable, inclusive et de qualité et un apprentissage tout au long de la vie pour tous, d'ici 2015 à 2030. Transformer les vies grâce à l'éducation* » (UNESCO, 2015). Tout ce qui précède a été repris dans un nouveau référentiel du développement du monde que sont les Objectifs de Développement Durable (ODD). Le point quatre de ces objectifs vise à « *garantir une éducation de qualité, sans exclusion et promouvoir des possibilités d'apprentissage tout au long de la vie pour tous* ». Les textes énumérés plus haut prônent, dans leur esprit, l'égalité des droits et des chances des personnes handicapées avec les autres catégories de citoyens. Par ailleurs, ils militent pour le traitement équitable des personnes vivant avec un ou plusieurs handicaps dans les prestations offertes aux citoyens par les différents services sociaux. Il découle des préconisations qui précèdent, la nécessité de varier et de renforcer les actions à mener en faveur de la scolarisation et de l'éducation des enfants handicapés. Dans cette logique, il apparaît fondamental que chaque enfant, quels que soient ses caractéristiques personnelles et ses besoins éducatifs spécifiques, ait le droit à l'épanouissement et à l'autonomie au sein de la société qu'il aura réussi à intégrer.

Le présent article rend compte des travaux que nous avons effectués et des résultats obtenus quant à l'organisation, le fonctionnement et la performance du Centre d'Accueil, d'Education et d'Intégration des Sourds de Louho (CAEIS) sis à Porto-Novo (CAEIS/Louho) dans le sud du Bénin. Ainsi les sections qui suivent comprennent les cadres théorique et physique de la recherche, la méthodologie utilisée et la présentation et l'analyse des résultats, ainsi que les perspectives relatives à ces résultats.

Cadres théorique et physique de la recherche

Cadre théorique

Conçue comme l'ensemble des problèmes et des interrogations qui accompagne l'évolution d'un domaine de savoirs et d'activités dans un cadre

déterminé (Legendre, 1993), la problématique qui constitue l'étape initiale de la présente recherche est sous-tendue par les préoccupations liées à l'offre éducative nécessaire pour permettre aux enfants vivant avec un handicap auditif de jouir comme tous les autres enfants, de leurs droits à une éducation de qualité. L'éducation est le processus qui permet à l'être humain de développer toutes les virtualités indélicées qu'il apporte à sa naissance et de réussir son intégration sociale (Ronstand, 1954). Dans cette entreprise, l'institution sociale qu'est l'école reste jusqu'à nos jours l'un des maillons les plus déterminants de toute société. Elle est donc le cadre idoine, au même titre que la famille et la communauté, qui accompagne le développement personnel et la socialisation de tout individu.

L'Organisation Mondiale de la Santé (OMS) (2001) définit le handicap comme le résultat de l'incapacité de l'environnement à assimiler et à gérer les altérités quelles que soient leur forme et leur origine. Ce n'est plus la nature de la déficience ou du trouble qui doit définir le type de réponse mais ce sont les besoins spéciaux qu'elles engendrent qui doivent être pris en considération. C'est pourquoi, au lieu de « personne handicapées », l'OMS préconise de préférer l'expression « personne en situation de handicap » et plus globalement « sujet à besoins spécifiques ou spéciaux. » Les causes des handicaps peuvent être très variées. Elles peuvent être congénitales ou traumatiques et survenir à tout moment de la vie (traumatismes extérieurs, maladies). La classification usuelle du handicap permet de distinguer cinq (5) catégories : (1) le handicap/mental/psychique/intellectuel (retard mental résultant de troubles psychiques très divers incluant névroses, psychoses...); (2) le handicap visuel (malvoyants, amblyopes ou aveugles); (3) le handicap auditif (malentendant, non entendant ou sourd); (4) le handicap moteur (troubles de la dextérité, paralysie ...) et (5) le handicap social regroupant les situations concernant, la prostitution, l'addiction (alcool, drogue), les conséquences néfastes de la dissociation familiale sur certains enfants.

Chacune de ces catégories de handicap nécessite une intervention appropriée, une prise en charge, une aide et des soins afin de permettre aux personnes concernées de s'adapter à leur environnement. La surdit  est le type de handicap  tudi  dans la pr sente recherche. Elle se manifeste essentiellement par la d ficiance auditive. Il existe deux types de d ficiance auditive : la d ficiance auditive de transmission et la d ficiance auditive neurosensorielle. La d ficiance auditive de transmission est un probl me de l'oreille externe ou moyenne. Elle est souvent curable m dicatement ou chirurgicalement ; tandis que la d ficiance auditive neurosensorielle est un probl me de l'oreille interne ou parfois du nerf auditif. Elle est g n ralement permanente et n cessite une r ducation, au moyen par exemple d'une proth se auditive. Les signes de la surdit  chez les jeunes enfants comprennent leur absence de r action   des bruits, le fait qu'ils r agissent lentement ou leur

retard dans l'apprentissage de la parole. Un enfant sourd peut aussi présenter des retards dans le développement de ses fonctions motrices et de la coordination, ou dans l'apprentissage de l'équilibre, de la faculté de ramper ou de marcher.

L'histoire de l'éducation des personnes vivant avec tel ou tel handicap révèle que plusieurs approches basées sur des préjugés diamétralement opposés, ont été tour à tour mises en œuvre. Il s'agit de l'éducation spécialisée, de l'éducation intégrative et de l'éducation inclusive.

L'éducation inclusive est une approche qui vise à accroître la participation et à réduire l'exclusion en répondant efficacement aux différents besoins de tous les apprenants. Elle prend en compte les besoins individuels en matière d'enseignement et d'apprentissage de tous les enfants et jeunes gens en situation de marginalisation et de vulnérabilité : enfants vivant avec handicap(s), enfants des rues, groupes d'enfants appartenant à des minorités ethniques, filles, enfants issus de familles démunies financièrement, enfants issus de familles nomades, réfugiés ou déplacés, enfants vivant avec le VIH/SIDA. L'éducation inclusive a pour objectif d'assurer à ces enfants l'égalité des droits et des chances en matière d'éducation. Elle est sous-tendue par une posture qui considère la diversité comme une composante essentielle du processus d'enseignement et d'apprentissage, et qui promeut le développement humain. L'éducation inclusive vise à combattre la marginalisation des individus en respectant le droit à la différence. Selon Handicap International (2012), un système éducatif est inclusif quand dans sa globalité, elle tient compte des mesures à prendre pour être à même de dispenser une éducation adéquate à tous les enfants qui apprennent ensemble. Des liens sont créés avec les services de soutien spécialisés et ordinaires. Le système éducatif inclusif suit une approche systémique du changement plutôt qu'une approche école par école.

Au plan international, ces dispositions juridiques sont en phase avec les résolutions adoptées par la Conférence Mondiale sur l'Éducation Pour Tous à Jomtien en Thaïlande (UNESCO, 1990), le Forum Mondial sur l'Éducation à Dakar, Sénégal (UNESCO, 2000 ; 2015). Tous ces textes promeuvent une éducation équitable, inclusive et de qualité avec des possibilités d'apprentissage tout au long de la vie pour tous, d'ici 2015 à 2030 et vise à transformer les vies grâce à l'éducation.

Mais au Bénin, dans les faits, les enfants handicapés continuent d'être traités comme les parents pauvres du système éducatif car, il existe très peu de structures éducatives spécialisées dans la prise en charge des différentes catégories de handicap. Par ailleurs, le fonctionnement de quelques rares structures existantes favorise très peu l'épanouissement personnel et l'intégration socioprofessionnelle des enfants qui y sont scolarisés. Pour tenter de remédier à cette situation, l'établissement scolaire dénommé *Centre*

d'Accueil, d'Education et d'Intégration des Sourds (CAEIS) de Louho a adopté une posture innovante qu'il met en œuvre avec plus ou moins de succès depuis plus d'un quart de siècle.

L'objectif de cette recherche est double. D'abord, il s'agit d'explorer les perceptions des acteurs du CAEIS/Louho vis-à-vis de leurs apprenants et de l'approche pédagogique mise en œuvre par le centre. Ensuite, il est question d'investiguer les réussites obtenues par le centre et les difficultés auxquelles font face les responsables de ce centre au cours de la scolarisation des enfants handicapés auditifs et ceux entendants.

Les trois questions ci-dessous ont été donc posées pour guider cette recherche.

- Quelles sont les perceptions des acteurs du CAEIS/Louho vis-à-vis de leurs apprenants et surtout des handicapés auditifs ?
- L'approche pédagogique conçue et mise en œuvre par les animateurs du CAEIS/Louho permet-elle d'assurer une éducation inclusive et l'épanouissement psychosocial des enfants handicapés auditifs ?
- Quels sont les résultats tangibles obtenus par le CAEIS/Louho et les difficultés auxquelles sont confrontés ses animateurs pour la scolarisation de ses apprenants ?

Selon le dictionnaire Grand Robert et dans le langage courant, on dit que l'être humain s'épanouit lorsqu'il développe librement toutes ses possibilités. En d'autres termes, l'épanouissement d'un individu est le plein développement, dans une ambiance de joie et de bonne humeur de ses potentialités, voire de ses dispositions d'existence. Dans cette recherche, ce que nous entendons par l'épanouissement psychosocial des enfants vivant avec un déficit auditif est le développement de chacun de ceux-ci, de toutes les potentialités de son être, de manière à s'assumer pleinement au plan individuel et à vivre harmonieusement au sein de sa société. Autrement dit, il s'agit, dans cette étude, de l'épanouissement des enfants malentendants ou sourds, tant sur le plan personnel que sur le plan de la psychologie humaine dans la vie sociale.

Cadre physique

Conformément à l'administration territoriale actuellement en vigueur au Bénin, le quartier Louho qui abrite le CAEIS est l'un des quartiers du 3^{ème} Arrondissement de Porto-Novo. La ville de Porto-Novo elle-même, est située au sud de la République du Bénin, à une trentaine de kilomètres de Cotonou qui est actuellement la principale porte d'entrée dans le pays. En 1993 est créé le CAEIS par les membres d'une ONG appelée Association Universelle d'Œuvres pour l'Epanouissement des Sourds (ASUNOES), composée de jeunes étudiants, ayant pour objectifs de défendre les droits des personnes sourdes, d'œuvrer pour l'épanouissement intellectuel, professionnel et

socioculturel de cette couche de la société et de lutter enfin contre la surdimotivité. A partir de 1994, le CAEIS qui abritait uniquement les enfants sourds est devenu un centre mixte, c'est-à-dire ouvert aussi bien aux enfants sourds qu'aux enfants entendants. Logé sur un site verdoyant, le CAEIS, dispose de l'espace vital nécessaire et d'une série d'installations pour ses acteurs et ses usagers. Au centre de la cour se dresse la statue de l'Abbé de l'Épée – fondateur de la première école des sourds-muets vers 1760 – qui s'impose à la vue comme un monument d'hommage. Juste à côté, on découvre des aires de jeux. Les bas-reliefs dessinés sur les murs des classes renseignent sur la spécificité de ce centre. Les lettres de l'alphabet pour le langage des signes y sont incrustées. Un peu en profondeur, en bas de l'immeuble se trouve la bibliothèque et les salles de classes qui abritent les sections de la maternelle. Au premier niveau du bâtiment, on trouve les classes de l'enseignement primaire et au second niveau celles de l'enseignement secondaire général, de la sixième en Terminale. Dans toutes les classes, de la Maternelle en Terminale, cohabitent sourds et entendants et parfois les deux catégories d'enfants partagent le même banc. Le centre compte 515 apprenants dont 235 déficients auditifs (voir archives CAEIS, 2018).

Méthodologie

Conception de la recherche

Pour la collecte des données, l'approche qualitative a été adoptée. L'approche qualitative est basée sur une recherche exploratrice et phénoménologique. La phénoménologie est une approche à la conceptualisation et à l'étude de l'expérience vécue (Giorgi, 2009 ; Mooij, 2010). La phénoménologie suppose à l'origine que les hommes possèdent quelque essence lorsqu'ils expérimentent un phénomène (Creswell, 2007; Marshall & Rossman, 2006). Ici, la recherche se concentre sur le vécu des animateurs du CAEIS/Louho.

Population cible et échantillonnage

La population cible de notre recherche est composée des acteurs du CAEIS/Louho ; à savoir les apprenants du centre, les parents des apprenants, les enseignants, les gestionnaires et les superviseurs pédagogiques. En ce qui concerne les apprenants intéressés par cette recherche, la recherche s'est focalisée sur ceux de la maternelle et du primaire. Les statistiques issues de la collecte des données montrent les effectifs suivants (voir tableau 1).

Tableau 1. Effectifs à la maternelle et au primaire et selon la catégorie des apprenants

Ordre d'enseignement	Entendant	Sourd	Total
Maternel (EM)	23	11	34
Primaire (EP)	131	87	218

Source: Archives de 2018 du CAEIS/Louho

Au vu de ce tableau, on se rend compte que dans ces deux ordres d'enseignement, le nombre de sourds n'est pas négligeable soit presque 39 % de cette population. Ils sont plus nombreux dans l'enseignement primaire (40 %) qu'à la maternelle (32,4 %). De cette population d'apprenants, cinq (dont deux sourds) ont été sélectionnés au hasard pour participer à la collecte des données.

En ce qui concerne les enseignants des deux ordres d'enseignement, on a 13 au total dont 4 sourds et 7 femmes et 6 hommes. Le tableau 2 présente leurs qualifications académiques et professionnelles. Il est à remarquer qu'au primaire, les enseignants travaillent par binômes dans les classes. Six enseignants ont été sélectionnés au hasard pour participer à la collecte des données, dont un dans chaque classe.

Tableau 2. Qualifications académiques et professionnelles des enseignants du CAEIS/Louho

Diplôme	Diplôme académique		Total	Diplôme professionnel			Total
	BEPC	BAC		Aucun	CEA P	CAP	
Nombre	2	11	13	4	7	2	13

Source: Archives de 2018 du CAEIS/Louho

Au total, le centre dispose de trois gestionnaires (dont le Directeur exécutif, le Directeur de l'école primaire, et la Responsable des programmes) et de deux superviseurs pédagogiques (dont l'inspecteur et le conseiller pédagogique de la zone du Réseau d'Animation Pédagogique dont dépend le CAEIS/Louho). Enfin, cinq parents d'élèves ont librement participé à l'étude.

Instrumentation et collecte des données

Plusieurs interviews réalisées individuellement et avec des focus groups, des observations de séquences de classes et des recherches documentaires ont permis de rassembler des données nécessaires pour répondre aux questions de recherche. En effet, toutes les questions posées au cours de ces interviews ont tourné autour des différentes questions de recherche.

Interviews

Dans le but de recueillir les perceptions des acteurs du CAEIS/Louho, les trois gestionnaires ont été soumis à des interviews semi-structurées, enregistrées sur des supports magnétiques d'une durée de 45 minutes chacune. Les questions auxquelles ils ont répondu sont libellés comme suit : (1) Quelles sont vos perceptions vis-à-vis de leurs apprenants surtout des handicapés auditifs ? (2) Détaillez un peu l'approche pédagogique innovée par le centre ? (3) Pensez-vous que l'enseignement reçu et l'encadrement dans cet établissement contribuent à l'épanouissement psychosocial des apprenants et

surtout des handicapés auditifs? et (4) Pourriez-vous nous parler des réussites obtenues par le centre et des défis auxquels vous êtes confrontés ?

Les deux superviseurs pédagogiques du centre ont été eux-aussi soumis aux mêmes types de questions, et ceci dans les mêmes conditions. L'accent a été mis, pour ces participants, sur les questionnaires (3) et (4).

Deux focus groups ont été formés, l'un composé des enseignants et l'autre, des parents sélectionnés. Hughes et Dumont (1993) indiquent que les focus groups sont particulièrement utiles pour réfléchir sur des réalités sociales d'un groupe culturel à travers l'accès direct au langage et aux concepts qui structurent les expériences des participants. Les membres de ces deux focus groups ont débattu, pendant environ une heure de temps, autour des mêmes questions posées aux gestionnaires. Les débats des focus groups ont été enregistrés sur des supports magnétiques.

Avec la permission des gestionnaires du centre, nous avons pu discuter avec les cinq apprenants sélectionnés. En ce qui concerne ce focus group, l'entretien a été plutôt non-directif. Les questions posées ont été relatives à la perception qu'ils ont des handicapés auditifs, la façon dont ils coopèrent au cours des leçons et des réussites et échecs qu'ils ont dans leur apprentissage. Ces apprenants ont exprimé leurs sentiments et impressions. Dans ce cas-ci aussi, leurs délibérations ont été enregistrées sur des supports magnétiques.

Observations des séquences de classe

Les observations des séquences de classes, effectuées dans les six classes du primaire avec l'équipe des chercheurs et des deux superviseurs pédagogiques du centre, ont porté essentiellement sur les deux champs de formation, « Français » et « Mathématiques », qui sont généralement considérés comme les plus déterminants parce qu'ils regroupent les disciplines instrumentales. Le tableau 3 ci-dessous fait le récapitulatif des observations effectuées

Tableau 3. Récapitulatif des champs de formation et des matières observés

Champ de formation	Matière	Nombre d'observation faite
Français	Orthographe	1
	Conjugaison	1
	Écriture	2
Mathématique	Arithmétique	3
	Géométrie	1
	Mesure	1
Nombre total d'observations faites	6	9

Source: Enquête de terrain, mars 2018

Ces observations de séquences de classe ont été réalisées à l'aide d'une grille de recueil de données sur le déroulement d'une séquence de classe. Cette grille comporte trois grandes parties dont les informations générales,

l'appréciation de la gestion de la séquence de classe et les principaux défis à relever. Les informations sont relatives à la date d'observation, le champ de formation observé, les objets d'apprentissage/contenu de formation prévus, la classe, l'effectif et le temps imparti. La deuxième partie, relative à l'appréciation de la gestion de la séquence de classe, est plutôt la grille d'observation de séquence de classe élaborée à partir de l'Outil de Suivi et d'Évaluation Pédagogique (OSEP)¹. Cette grille est composée de 30 indicateurs de performances des enseignants dans l'organisation des activités d'apprentissage parmi lesquels dix (numérotés de 15 à 30) sont spécifiques aux apprenants sourds. Par exemple, l'indicateur no 16 stipule : Collaboration entre enfants entendants et enfants non entendants ; le no 18 dit :

Prise en compte du handicap de l'enfant (surdit ) ; etc. Au cours de son observation, l' valuateur a la possibilit  de marquer l'une des cinq niveaux de performance   savoir : A = Excellent ; B= Tr s bien ; C = Bien ; D = Insuffisant et E = Tr s Insuffisant. Enfin, la troisi me partie de cet instrument demande   l' valuateur de relever les trois d fis majeurs   surmonter aussi bien par les enseignants que les apprenants.

Recherche documentaire

Au cours des investigations, les archives du centre ont  t  consult es pour confronter certaines donn es obtenues au cours des entretiens. Les documents compuls s sont les cahiers de texte, les registres listant des r sultats obtenus dans le centre et d'autres documents et objets de reconnaissance pouvant permettre d'appr cier le travail fait dans la scolarisation des jeunes apprenants inscrits dans le centre, ceci depuis la cr ation de ce dernier.

Analyse des donn es recueillies

Dans les recherches qualitatives, l'analyse des donn es consiste   coder,   faire ressortir des cat gories et   rechercher des mod les et les synth tiser (Bogdan et Biklen, 2007). Par cons quent, une analyse des contenus a  t  r alis e. Pour ce faire, tous les entretiens enregistr s ont  t  d'abord transcrits verbatim pour l'analyse ph nom nologique en utilisant un programme informatis  de traitement de texte ; puis la mise en exergue des d clarations importantes et significatives des sujets participant   l' tude a  t  faite pour comprendre leurs exp riences v cues avec ou dans le centre. Ensuite, en tenant compte des questions de recherche, chaque transcription a  t  cod e afin d'extraire des th mes pertinents. Finalement, toujours en tenant compte de questions de recherche, les th mes  mergents ont  t  cat goris s

¹ Cet outil a  t   labor  en 2011, par une  quipe de chercheurs de la Chaire Unesco de D veloppement Curriculaire de l'Universit  du Qu bec Montr al (CDUC) et de B ninois avertis dans le cadre de la mise en  uvre du Projet TMT/USAID

et éventuellement remplacés sans oublier la sélection des extraits pour les soutenir.

En ce qui concerne les observations des séquences de classe effectuées dans les six classes du primaire, les pourcentages des performances des enseignants inscrits par l'équipe des chercheurs et des superviseurs pédagogiques ont été manuellement calculés. La moyenne des cinq niveaux de performance A, B, C, D et E a été retenue.

L'analyse quantitative des données recueillies lors des observations de classe a été réalisée à l'aide du logiciel Excel pour calculer les statistiques descriptives telles que les pourcentages et réaliser le graphique des performances des enseignants observés.

Résultats

Question de recherche 1 : Quelles sont les perceptions des acteurs du CAEIS/Louho vis-à-vis de leurs apprenants et surtout des handicapés auditifs ?

Perceptions du sourd et de la surdité et son statut dans la société

Il est question ici de souligner l'impression de chacun des groupes interviewés sur la manifestation de la surdité et statut du sourd dans la société. Des données recueillies, les acteurs impliqués dans le centre ont des perceptions différentes vis-à-vis des apprenants handicapés auditifs.

Les gestionnaires et la presque totalité des enseignants (80 %) du CAEIS/Louho, indiquent que la surdité découle souvent de causes biologiques (séquelles de diverses maladies comme la méningite, la rougeole, des otites mal soignées...) et d'accidents provoqués par l'introduction involontaire ou volontaire d'un ou de plusieurs corps étrangers dans le conduit auditif. Ils sont tous convaincus qu'une bonne hygiène de vie permettra à cours sûr de prévenir la plupart des cas de surdité. Selon les gestionnaires du centre, les préjugés défavorables au sourd sont très vivaces. La chargée des programmes (vivant elle-même vit avec un handicap de surdité) nous a décrit de façon émouvante la discrimination négative dont elle est souvent victime dans la recherche d'emploi et dans sa vie sentimentale. Elle conclut en affirmant que c'est cette situation qui justifie le fait que les personnes sourdes préfèrent se marier entre elles.

Selon les superviseurs pédagogiques du centre, la surdité est souvent héréditaire, ou est consécutive à un accident et à des séquelles d'une maladie comme la rougeole par exemple et parfois d'un mauvais sort jeté à la famille de l'enfant sourd par une tierce personne.

Les apprenants (80 %) et les parents d'apprenants perçoivent la surdité comme la résultante de divers facteurs mystiques (envoutement, malédiction ou mauvais sort jeté sur l'un des géniteurs de l'enfant sourd par une tierce personne, etc.).

Ainsi n'étant pas des spécialistes en la matière, chacun de ces acteurs du centre a donné ses perceptions sur ce qu'est le sourd. Il faut souligner que la situation des sourds dans la société n'est pas reluisante ; car ils sont la plupart du temps objets de mauvais préjugés.

Scolarisation et Educabilité des enfants souffrant d'un handicap auditif

Tous les interviewés sont unanimes, à part le groupe des parents d'élèves, pour déclarer que la scolarisation et l'éducation des enfants souffrant d'un handicap auditif sont possibles. Cependant, chaque groupe met un bémol à cette possibilité.

Le leitmotiv des gestionnaires du centre est que malgré son incapacité à percevoir clairement les sons et à entendre, l'enfant sourd peut réussir dans tous les domaines d'apprentissages et s'épanouir pleinement pour s'insérer harmonieusement dans la vie professionnelle si les mesures idoines sont prises par l'école.

Selon les superviseurs pédagogiques, la scolarisation et l'éducation des sourds sont possibles mais de préférence dans les écoles spécialisées dans ce domaine et exclusivement réservées aux enfants vivant avec ce handicap. Tous les apprenants affirment que la surdité n'est pas invalidante et que leur incapacité à entendre les sons ne constitue pas un handicap pour eux. En d'autres termes, le sourd peut aller à l'école et y réussir autant que les non sourds et participer plus tard à une vie professionnelle.

Les membres du focus group des enseignants n'ont pas le moindre doute sur la possibilité de scolariser, d'éduquer et de former les sourds afin qu'ils s'insèrent harmonieusement dans la vie socio-professionnelle. En effet, les enseignants, en reconnaissant que les sourds peuvent bien réussir à l'école, indiquent le comportement des pédagogues qu'ils sont, face à un apprenant sourd. Au cours des entretiens, un enseignant dira en substance que ce dont le sourd a besoin de la part des autres, ce n'est ni la pitié, ni la compassion mais le respect mutuel, la valorisation de son être et des opportunités pertinentes pour apprendre en collaboration avec ses camarades de classe. Ils affirment, en outre qu'ils participent pleinement à des activités parascolaires au même titre que les apprenants entendants. L'extrait ci-dessous résume leurs propos :

Face à leur situation de mal entendant et même de non entendant, les sourds développent des stratégies de compensation qui leur permettent de comprendre leurs interlocuteurs rien qu'en observant les mouvements de leurs lèvres et leurs mimiques, et d'être des acteurs à part entière des troupes de danse et de théâtre au point où il est pratiquement impossible aux spectateurs de distinguer les sourds des non sourds. (Interview du focus group des enseignants, 2018)

Seuls les parents, dans leur focus group, ont des impressions différentes par rapport à la scolarisation et l'éducabilité des enfants sourds. Certains

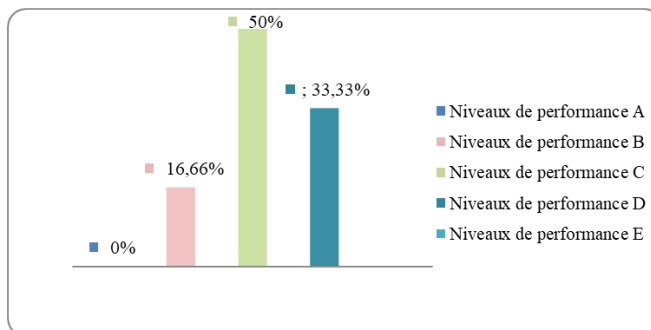
d'entre eux (80 %) affirment que les enfants sourds ne peuvent pas être scolarisés comme les enfants « normaux » ; tandis que les 20 % restants sont convaincus que les sourds peuvent être scolarisés, mais seulement dans des écoles spécialisées.

Question de recherche 2 : L'approche pédagogique conçue et mise en œuvre par les animateurs du CAEIS/Louho permet-elle d'assurer une éducation inclusive et l'épanouissement psychosocial des enfants handicapés auditifs ?

Au cours des entretiens, les gestionnaires du centre ont affirmé que leurs apprenants sont enseignés suivant les programmes d'études en vigueur dans les écoles primaires au Bénin, puisqu'il n'existe pas de programmes officiels conçus spécialement pour ce type d'école. Ils ont cependant souligné que le temps imparti aux différentes matières enseignées est un peu plus allongé compte tenu de la présence des apprenants handicapés auditifs dans les classes. De même, les manuels didactiques utilisés dans le centre sont ceux des autres écoles primaires ordinaires.

Au cours des observations des séquences de classe, les pratiques des enseignants ont été observées. D'abord, le climat dans lequel les cours se déroulent est assez convivial et propice à l'apprentissage. Les deux groupes d'apprenants, sourds et entendants cohabitent et souvent ces derniers partagent le même banc et travaillent en symbiose. Les cours sont dispensés simultanément en français parlé et en langue des signes. Ainsi, lorsque l'enseignant ou un apprenant pose une question en classe, tout élève entendant peut lui répondre en langue des signes tout en verbalisant ce qu'il veut dire pour ses camarades entendants, comme tout élève sourd peut répondre à la question posée ou donner son point de vue en ayant recours au langage des signes que tout le groupe classe décrypte aisément. Un autre constat fait au cours des séquences de classe est que lorsqu'une consigne de travail est donnée par l'enseignant, les apprenants exécutent tous le même geste. En effet, si l'apprenant entendant comprend une instruction donnée par l'enseignant, parfois même en ne regardant pas ce dernier, l'enfant frappé du handicap auditif, lui, est attentif au geste, regarde l'enseignant et réalise la consigne indiquée.

Les résultats de l'analyse des grilles d'observation des séquences de classe ont montré les niveaux de performance atteints par les enseignants dans les six classes du primaire. Le graphique ci-dessous montre la moyenne des cinq niveaux de performance à savoir : A = Excellent ; B= Très bien ; C = Bien ; D = Insuffisant et E = Très Insuffisant.



Graphique: Niveaux de performance des enseignants observés

Ce graphique indique que les performances des enseignants observés ne sont ni excellentes (A) ni très insuffisantes (E). Cependant, on peut avancer que ces performances sont plus ou moins acceptables (66,7 %), car 16,7 % sont très bonnes (B) et 50 % bonnes (C) ; tandis que 33,3 % sont insuffisantes.

Au-delà de ces données académiques, il a été noté que ces apprenants du CAEIS/Louho sont éveillés et très épanouis sur le plan socio-culturel. En effet, les gestionnaires du centre et le focus group des enseignants ont, de façon indépendante, affirmé que ces apprenants, bien qu'ils aient un handicap auditif, ont des prédispositions artistiques qu'ils développent au cours de leur cursus. Les encadreurs du centre les y aident en créant le cadre adéquat à l'éclosion de leurs talents. Ci-dessous est résumé les récits des enseignants relatifs à ces dispositions des apprenants et de l'effort que fournit le CAEIS/Louho pour soutenir ces vocations :

On peut affirmer que les enfants vivant avec un handicap auditif sont de véritables musiciens, de très bons poètes, bref d'excellents artistes. Le centre a alors mis sur pied un ensemble artistique et culturel composé d'une troupe de danses traditionnelles et d'une compagnie théâtrale. Cet ensemble offre aux enfants sourds et aux enfants entendants un creuset au sein duquel ils s'entraînent pour s'épanouir et mettre en valeur leurs compétences artistiques et culturelles. C'est ce qui leur permet de produire régulièrement des spectacles et de participer à diverses compétitions ici au Bénin, dans la sous-région et au niveau international où ils ont remporté plusieurs trophées que vous pouvez voir dans l'administration. (Interview du focus group des enseignants, 2018)

Au total, l'approche pédagogique mise en œuvre est sous-tendue par des stratégies d'enseignement-apprentissage qui font des malentendants et des sourds, non plus des éléments « entièrement à part », mais des « membres à part entière » des différents groupes pédagogiques existant dans cet établissement. En effet, les relations existant entre les deux catégories d'apprenants sont telles qu'il n'y a aucun complexe d'infériorité ou de

supériorité de part et d'autre, de toute condescendance et de toute méfiance. Ainsi, comme nous l'on mentionné les gestionnaires du centre, l'approche pédagogique prônée par le CAEIS/Louho et mise en œuvre et les activités parascolaires favorisent l'épanouissement intellectuel et psychosocial des enfants en général, et, en particulier, de ceux vivant avec un handicap de surdité.

Question de recherche 3 : Quels sont les résultats tangibles obtenus par le CAEIS/Louho et les difficultés auxquelles sont confrontés ses animateurs pour la scolarisation de ses apprenants ?

Résultats tangibles obtenus par le CAEIS/Louho

Les résultats obtenus par le centre ont été appréciés aussi bien à travers les interviews que dans les documents consultés. Les gestionnaires du centre et les enseignants interviewés ont été unanimes pour affirmer que les résultats sont très encourageants et qu'ils sont confortés par le progrès de leurs apprenants. D'abord, le taux de déperdition des apprenants inscrits est très faible. Un des gestionnaires nous a confié ce qui suit :

Hormis quelques cas rarissimes, il n'y a pratiquement pas d'abandon et le taux de redoublement est insignifiant. Par ailleurs, et conformément aux instructions officielles, il n'y a pas de redoublement à l'intérieur des sous-cycles parce que des dispositions pratiques sont régulièrement prises pour identifier à temps les difficultés des apprenants dans telle ou telle matière. (Interview d'un gestionnaire du CAEIS/Louho, 2018)

Cette citation évoque le sérieux du centre pour le contrôle et le maintien des apprenants à l'école.

La recherche documentaire dans le centre a révélé des données qui démontrent que le centre a accumulé un certain nombre de succès au fil des années. Le tableau ci-dessous montre les résultats des apprenants du centre sur trois années précédents notre collecte des données.

Tableau 4. Récapitulatif des taux de réussite au CEP sessions 2016 à 2018 du CAEIS/Louho

Session	Candidats présentés			Candidats admis			
	Sourd	Entendant	Total	Sourd	Entendant	Total	Taux (%)
2016	20	34	54	17	28	45	83,33
2017	15	35	50	12	32	44	88,00
2018	19	26	45	15	22	37	82,22

Source: Archives CAEIS/Louho, 2018

Ce tableau indique que sur trois années consécutives les résultats au certificat d'études primaires (CEP), qui est l'examen qui sanctionne les six (6) années d'études du cycle primaire, ont été très bons dans l'ensemble, au regard

des taux de réussite affichés. On peut affirmer que ces taux sont largement supérieurs aux taux moyens nationaux au cours des années considérées qui étaient respectivement, 39,26 %, 65,22 % et 64,44 %. On remarque aussi que durant ces années, les taux de réussite des malentendants ont été globalement très bons, puisqu'on a eu respectivement 85 %, 80 % et 79 %. Cependant, on n'occultera pas aussi que ces taux sont en baisse.

Dans les archives du CAEIS/Louho, nous avons retrouvé plusieurs documents indiquant des accords de partenariat du centre avec plusieurs organismes aussi bien nationaux qu'internationaux. Des lettres de reconnaissance et de satisfecit et divers prix reçus à travers le monde attestent de l'expertise et de l'impact qu'exerce le CAEIS/Louho en matière d'enseignement et de l'éducation inclusive des sourds dans le monde. Par exemple, sur la pochette d'un DVD produit et publié par un consortium de chaînes de télévision européennes pour célébrer le CAEIS/Louho, on peut lire ces épigraphes « Le CAEIS : une école pour sourds pas comme les autres » et « Leçon de vie ou comment l'Afrique devient un modèle pour le monde occidental. » Par ailleurs, la consultation des documents a révélé que le centre a acquis une envergure sous régionale et même internationale, puisque parmi ses apprenants, on y dénombre, des ressortissants de cinq pays africains à savoir la Côte-d'Ivoire, le Togo, le Burkina-Faso, le Mali et le Nigéria.

Difficultés auxquelles sont confrontés les animateurs du centre

Selon les questionnaires du CAEIS/Louho, les obstacles auxquels ils font face pour la scolarisation de leurs apprenants sont divers. On peut citer le défaut de formation et de qualification des enseignants, l'insuffisance de supervision pédagogique, l'absence de soutien de l'Etat et des autorités locales, le retard de paiement des salaires des enseignants et le manque de matériel didactiques adéquat.

Les enseignants intervenant dans le centre, n'ont reçu aucune formation initiale pédagogique en matière d'enseignement aux sourds. En effet, ces enseignants n'ont pas pris par une école normale des instituteurs, et n'ont donc pas acquis les dispositions spéciales nécessaires relatives à la langue des signes et intervenir de façon spécifiques auprès des apprenants sourds. Un des enseignants nous a confié dans le focus group :

Mon ambition est d'aider ces jeunes malentendants à étudier. Alors, avant de me faire embaucher, j'ai suivi les formations qu'offre périodiquement le centre pendant les vacances sur le plan pédagogique et aussi pour l'apprentissage de la langue des signes. On a appris tout ce dont a besoin un enseignant pour enseigner, y compris le contenu des programmes d'études de l'enseignement primaire, la préparation des fiches pédagogiques et surtout l'utilisation de la langue des signes. Après plusieurs années de formation, j'enseigne

aujourd'hui assez aisément à ces jeunes et je fais usage habituellement de la langue des signes. (Interview du focus group des enseignants, 2018)

Cet extrait montre la détermination des enseignants à se consacrer à la scolarisation des jeunes sourds, malgré le fait qu'au départ, ils n'avaient pas le profil approprié.

Une autre difficulté rencontrée par les gestionnaires et les enseignants du centre est l'insuffisance, voire l'inexistence de supervision pédagogique de la part des conseillers pédagogiques et des inspecteurs de l'enseignement dans le cadre de la formation de proximité des enseignants. Il faut rappeler que les deux superviseurs pédagogiques (dont l'inspecteur et le conseiller pédagogique de la zone du Réseau d'Animation Pédagogique dont dépend le CAEIS/Louho) du centre sont chargés respectivement du suivi du déroulement des activités d'apprentissage et de la scolarité des élèves du centre et de la formation de proximité, du suivi et de l'évaluation des performances des enseignants. Or les enseignants du CAEIS/Louho ne bénéficient pas d'activités d'encadrement et de suivi (visites d'école, visite de classe, conférences pédagogiques, animation pédagogique organisées deux fois par mois au niveau des Unités Pédagogiques...), du moins pendant les deux années scolaires 2016-2017 et 2017-2018. La raison évoquée par ces cadres du ministère de l'enseignement maternel et primaire (MEMP) est que la scolarisation et l'éducation des sourds sont possibles mais de préférence dans les écoles spécialisées dans ce domaine et exclusivement réservées aux enfants vivant avec ce handicap. Exaspéré, un des gestionnaires signale :

Tout se passe donc comme si le CAEIS est un « îlot perdu complètement à part » dans le concert des écoles maternelles et des écoles primaires publiques et privées de cette localité. Cet état des choses laisse entrevoir qu'il y a un certain nombre de préalables à régler si l'on veut promouvoir et développer la scolarisation et l'éducation des sourds en améliorant l'offre d'éducation à travers la mise en œuvre selon le cas, de l'approche d'intégration où de l'approche d'inclusion. (Interview du focus group des gestionnaires, 2018)

Ce verbatim montre bien l'état de délaissement dans lequel se trouve le centre vis-à-vis du suivi pédagogique. Ceci tout comme si le centre n'a aucune existence légale. Les gestionnaires ont, durant toute la durée de l'interview, martelé l'abandon dont ils sont sujets de la part de ces cadres du MEMP, malgré les résultats probants qu'ils obtiennent chaque année scolaire.

L'absence des supports de l'Etat central et des autorités communales constitue une entrave au développement du CAEIS/Louho selon les gestionnaires du centre. En effet, selon ces derniers, les responsables à divers niveaux dans le pays sont au courant de l'existence du centre et des efforts

entrepris dans la scolarisation des sourds. Cependant, ils ne manifestent aucune volonté de les aider face à leurs demandes régulières des ressources humaines, financières et surtout didactiques. Il est à remarquer que la recherche documentaire a montré des rapports et des photos montrant des visites au centre de plusieurs ministres de l'enseignement maternel et du primaire et de celle des affaires sociales, qui ont reconnu le gigantesque et exceptionnel travail qu'abattent les animateurs du centre relativement à la scolarisation des sourds et à leur prise en charge dans la société. Par ailleurs, cette recherche documentaire a révélé les traces des visites de certaines organisations non gouvernementales (ONG) et autres Fondations qui visitent le centre et leur apportent des aides épisodiques, mais appréciables. Le CAEIS/Louho a développé des partenariats avec des ONG et certaines institutions européennes (Belgique, Allemagne, Pays-Bas et France) et américaines chargées de l'éducation des sourds ; ceci permet, entre autres, des échanges réguliers d'expériences et d'acteurs (enseignants, stagiaires, spécialistes, etc.).

Le retard de paiement des salaires des enseignants est aussi une autre difficulté dont font face les superviseurs du centre. Le focus group des enseignants a décrit de manière pathétique des faits particuliers relatifs à leur vie professionnelle. Ils ont ainsi souligné que pour diverses raisons (établissement non subventionné par l'Etat, apprenants venant de familles défavorisées n'honorant pas entièrement les frais d'écolage, etc.), leurs émoluments mensuels accusent parfois des retards d'un à plusieurs mois. Ce qui entraîne de la part de ces derniers des frustrations et souvent des découragements.

Enfin, la dernière difficulté évoquée par les animateurs du CAEIS/Louho est le manque de matériel approprié pour enseigner les apprenants du centre.

Perspectives

Au vu des données recueillies pour répondre aux différentes questions, et plus précisément : (1) de la possibilité de la scolarisation et de l'éducabilité des enfants souffrant d'un handicap auditif ; (2) de l'approche pédagogique novatrice conçue et mise en œuvre par les animateurs du CAEIS/Louho qui permet d'assurer une éducation inclusive et l'épanouissement psychosocial des enfants handicapés auditifs ; et (3) des multiples succès obtenus par le centre, mais aussi des difficultés auxquelles sont confrontés ses animateurs pour la scolarisation de ses apprenants, il est opportun d'émettre quelques réflexions dans les sections ci-dessous.

Il est reconnu que le CAEIS/Louho, forme et prépare ses apprenants à l'examen national du CEP. De même, le centre prend une envergure internationale dans la formation inclusive des sourds, vu les satisfécits décernés par les gouvernants et ses multiples partenariats avec les ONG et

d'autres Fondations aussi bien nationales qu'internationales. De ce fait, il serait convenable de pérenniser l'expérience de ce centre, à travers diverses actions.

Premièrement, l'approche pédagogique innovante, conçue et mise en œuvre par le centre, qui consiste en la scolarisation inclusive de ses apprenants devrait être encouragée et promue par le MEMP. Si des organisations internationales ont reconnu les succès obtenus par le CAEIS/Louho dans la scolarisation et l'éducation des enfants entendants et malentendants, c'est vraisemblablement parce qu'il y a un positionnement scientifique, éducatif pertinent que les gouvernants gagneraient à accompagner pour cultiver l'excellence. En termes de promotion, la formation pédagogique des enseignants du centre et leur suivi sur le terrain par des cadres du MEMP seraient indiqués. En effet, l'Etat béninois a mis en place sur tout le territoire des écoles et autres centres spéciaux qui s'occupent de l'éducation des enfants handicapés. Mais il est remarquable de souligner la particularité de ce centre qui, au départ, était destiné à former les malentendants, mais qui s'est ouvert aux entendants aussi. Par conséquent, les enseignants devraient être formés pour enseigner, utilisant l'approche pédagogique innovante et inclusive initiée par le centre et qui fait ses preuves. A l'instar de certains partenaires, le MEMP et le ministère de la famille devraient envoyer souvent des subventions substantielles pour aider le centre à faire face à ses nombreux besoins qui sont financiers, matériels et didactiques.

Deuxièmement, la pérennisation de l'expérience de ce centre passerait par la documentation des étapes de cette approche pédagogique inclusive et de sa divulgation sur le plan international afin de faire de cet établissement une école de référence pour la mise en œuvre du volet « Éducation inclusive » du Plan Sectoriel de l'Éducation post 2015 dans l'optique de l'atteinte de l'ODD4. Ceci pour amorcer la création massive, dans le monde, des écoles inclusives pour l'éducation des enfants handicapés.

Conclusion

Cette étude met en exergue l'expérience instructive du CAEIS/Louho à travers son approche inclusive de scolarisation des jeunes malentendants et des entendants en République du Bénin. Des résultats des trois questions posées pour guider cette recherche, on peut tirer les enseignements suivants. Premièrement, tous les acteurs du centre, à part quelques parents d'élèves, ont reconnu que malgré leur incapacité à percevoir les sons et à entendre, les enfants sourds peuvent réussir dans tous les domaines d'apprentissages et s'épanouir pleinement pour s'insérer dans le tissu social si des dispositions adéquates sont prises par l'école. Deuxièmement, l'approche pédagogique innovante conçue et mise par les animateurs du centre permet à leurs apprenants de réussir sur le plan scolaire. Au-delà de ces réussites

académiques, ces apprenants handicapés auditifs mènent plusieurs activités parascolaires qui assurent leur épanouissement psychosocial. Enfin troisièmement, malgré les résultats probants du centre dans les classes et à l'examen du CEP et les nombreuses lettres de reconnaissance et de satisfecit et divers prix reçus à travers le monde attestent de l'expertise et de l'impact qu'exerce le CAEIS/Louho en matière d'enseignement et de l'éducation des sourds dans le monde, des difficultés persistent qui ont pour nom le défaut de formation et de qualification des enseignants, l'insuffisance de supervision pédagogique, l'absence de soutien de l'Etat et autres autorités locales, et le manque de matériel didactiques adéquat.

References:

1. Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theory and methods*. New York, NY: Pearson Education.
2. Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
3. Giorgi, A. (2009). *The descriptive phenomenological method in psychology: A modified Husserlian approach*. Pittsburgh, PA: Duquesne University Press.
4. Handicap International (2012). *L'éducation inclusive, document cadre*. Consulté le 12/02/2019 sur le site : <https://handicap-international.ch/sites/ch/files/documents/files/education-inclusive.pdf>
5. Hughes, D., Dumont K. (1993). Using focus groups to facilitate culturally anchored research. *American Journal of Community Psychology*, 21(6), 775-806.
6. Legendre, R. (1993). *Dictionnaire actuel de l'éducation*. Paris. ESKA.
7. Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research*. Thousand Oaks, CA: Sage.
8. Ministère de l'Education Nationale (2003 et 2005). *Loi n°2003-17 portant Orientation de l'Éducation Nationale en République du Bénin rectifiée par la loi n°2005-33 du 06 octobre 2005*. Porto-Novo, Bénin.
9. Mooij, A. (2010). *Intentionality, desire, responsibility: A study in phenomenology, psychoanalysis and law*. Boston, MA: Brill.
10. Nguéhan, S. B. (2007). *Environnement social précaire, décrochage scolaire et stratégies de réussite : une étude exploratoire du phénomène au quartier New-Bell de Douala*. Master II à l'Université de Douala, Cameroun.
11. Organisation Mondiale de la Santé (2001). *Classification internationale du fonctionnement, du handicap et de la santé (CIF)*. *Classification Internationale du Handicap*. Consulté le 21/03/2019 sur le site:

https://apps.who.int/iris/bitstream/handle/10665/42418/9242545422_fre.pdf

12. République du Bénin (1990). Constitution de la République du Bénin. Porto-Novo.
13. Rostand, J. (1954). Les pensées d'un biologiste. Consulté le 21/03/2019 sur le site : <https://www.mon-poeme.fr/citations-jean-rostand-pensees-biologiste/>
14. UNESCO (1990). Déclaration mondiale sur l'éducation pour tous et cadre d'action pour répondre aux besoins éducatifs fondamentaux. Conférence mondiale sur l'éducation pour tous, Jomtien, Thaïlande. Publiée par l'Inter-Agency Commission. UNICEF House, New York, N.Y. avril 1990
15. UNESCO (2000). Forum mondial sur l'éducation : Le cadre d'action de Dakar. Dakar, Sénégal. Consulté le 02/03//2019 sur le site : www2.unesco.org/wef/en-leadup/dakfram.shtm
16. UNESCO (2015). Education 2030: Incheon Declaration and Framework for Action Towards inclusive and equitable quality education and lifelong learning for all. Consulté le 09/02/2020 sur le site : <https://iite.unesco.org/publications/education-2030-incheon-declaration-framework-action-towards-inclusive-equitable-quality-education-lifelong-learning/>



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De L'utopie Mondialiste A La Nouvelle Utopie Altermondialiste Face A La Pauvrete Et Aux Inegalites

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Résumé

Réverbérer sur les promesses et les déboires de la mondialisation et de l'altermondialisme, constitue le contenu de ce papier.

Sans nul doute, la réflexion relance le débat sur la crédibilité des alternatives au capitalisme ultralibéral. L'argument développé souligne que si la mondialisation économique (le capitalisme) n'a pas tenu ses promesses, le mouvement altermondialiste qui s'en est érigé en adversaire farouche et autodéterminé à agir autrement en vue de construire un autre monde où le capital ne serait qu'un outil au service de l'humanité, a aussi engendré ses propres contradictions et provoqué de nouvelles insatisfactions.

Si l'altermondialisme a voulu corriger ou réparer les effets nocifs de la mondialisation, il a aussi, dans sa praxéologie, reproduit certaines tares de son adversaire et provoqué des nouvelles déceptions dans le procès de la pauvreté et des inégalités. Ainsi, jusque là, le monde n'a fait que passer de l'utopie à la nouvelle utopie.

Mots-clés: Mondialisation, Altermondialisme, Capitalisme, Pauvreté, Inégalités, Utopie

From The World Viewpoint Utter To The Newalterworld- Viewpoint Utter Confronted To Poverty And Inequality

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Abstract

Reverberating on the promises and setbacks of globalization and alter-globalization is the content of this paper.

No doubt, the reflection restarts the debates on the credibility of alternatives to ultraliberal capitalism. The scrutinized idea shows if economic globalization (capitalism) has not made its promises, the alter-globalization movement which has itself up as a fierce and self-determined opponent to act differently in order to build another world where capital would be a tool of humanity service, has also generated its own contradictions and provoked new dissatisfaction.

If the alter-globalization wanted to correct or repair the globalization harmful effects, it has also, in its praxeology, reproduced certain defects of its adversary and provoked new disappointments in the process of poverty and inequalities. So, till then, the world has only shifted from the utopia to the new utopia.

Keywords: Globalization, Alter-Globalization, Capitalism, Poverty, Inequalities, Utopia

Introduction

Le monde est toujours à la recherche du paradigme unificateur, pour la prise en charge des problèmes mondiaux, notamment le terrorisme, le réchauffement climatique, le VIH/ SIDA, les différentes pandémies, la pauvreté et les inégalités, etc.

Il n'est guère surprenant de constater que la globalité est l'approche la plus mobilisée par la société-monde face à ces différents problèmes. Chaque fois que le monde se trouve confronté à l'un ou l'autre de ces problèmes, le concept de démarche globale ou simplement la globalisation est plus évoqué et souligne l'intention de s'unir pour réussir la lutte.

Notre réflexion sur les différents paradigmes d'intervention face aux inégalités dans le monde en général et le cas de la ville de Bukavu en particulier mobilise le concept d'utopie. Mais, pourquoi axer la réflexion sur l'utopie ? On pense bien souvent que l'utopie est un domaine des autres domaines et non de la sociologie. Pourtant, la sociologie de Jean Barrea (2007) traite de l'utopie, en soutenant que « [...] dans les moments de crises du réel,

les solutions tendent à venir d'ailleurs que de la sphère politique. Tandis que la politique gère, la culture crée; et celle-ci entre précisément en ébullition quand la réalité historique est acculée à l'impasse ». De la sorte, les crises sont «porteuses d'utopies créatrices ». Cela semble avoir été compris par les acteurs de la mondialisation et ceux de l'altermondialisme, deux projets aux ambitions contraires mais apparemment conciliables dans certains contextes. Ainsi, l'analyse sociologique étayée dans cet article se focalise sur les promesses et les déboires de ces deux paradigmes en confrontation avec la réalité.

Le corps de ce papier est constitué de trois points saillants: le premier traite de la démarche méthodologique, le deuxième est consacré à la revue de la littérature et cherche ainsi à repérer les origines socio-économiques de la mondialisation et identifier l'utopie dans le projet mondialiste à travers ses promesses et ses déboires, et enfin, le troisième point se propose d'expliquer les fondements de la colère de la société civile mondiale et la conception d'un projet altermondialiste, avec comme objectif de déceler la nouvelle utopie dissimulée dans le projet altermondialiste, à partir de son discours (promesses) et sa praxéologie sur le terrain de la pauvreté et des inégalités dans la ville de Bukavu.

Demarche Methodologique

Le parcours qui a conduit à la rédaction de ce papier a emprunté trois moments clés : la revue de la littérature sur les fondements socio-économiques de la mondialisation et sur les fondements de la colère des altermondialistes, la collecte des données et leur analyse.

Ainsi, la revue a sélectionné les écrits critiques de la mondialisation en mettant en relief ses origines, ses enjeux et ses déboires. L'effort de documentation nous a permis de retenir que la mondialisation a formulé des promesses qu'elle n'a pas réalisées dans le processus de la construction d'un monde où les inégalités et la pauvreté sont sensiblement réduites. C'est cela qui a suscité des critiques acerbes de la part des élites et de la société civile mondiale, au point d'initier un nouveau paradigme, à savoir celui de l'altermondialisme. Ce dernier a à son tour formulé des promesses dont les résultats ne semblent pas confirmer la démarcation avec son adversaire désigné qu'est la mondialisation.

Quant à la phase de la collecte des données, elle s'est servie de l'observation désengagée et l'entretien non directif menés dans la ville de Bukavu en tant qu'étude de cas, portant sur les actions des organisations œuvrant dans le cadre de l'économie sociale et solidaire conçue en tant que conséquence du mouvement altermondialiste et sur le niveau de réalisation des promesses de la mondialisation et de l'altermondialisme dans la ville de Bukavu. Ces deux techniques ont permis de collecter les données en référence avec le niveau d'accomplissement des promesses de la mondialisation et de

l'altermondialisme dans le processus de réalisation du bien-être de la société. Les membres des Coopératives et des mutuelles opérant actuellement à Bukavu ont constitué le substrat humain de la recherche. Ce faisant, des rencontres programmées ont permis d'engager des échanges avec ces membres dans les salons de bureau de leurs coopératives et mutuelles. L'entretien s'arrêtait dès que la saturation était constatée. Ainsi, les membres des COOPEC Cahi, Kawa (avant sa faillite), Pilote et de la mutuelle d'épargne et de crédit Ibanda ont été enquêtés.

Pour sa part, notre analyse des données est essentiellement qualitative, axée sur le contenu. La confrontation des données empiriques aux différentes promesses de la mondialisation et de l'altermondialisation a emprunté une allure de comparaison, d'interprétation et de discussion des faits, en vue de relever les contradictions au cœur même de ces deux paradigmes d'appréhension des réalités mondiales à partir des réalités locales. C'est l'analyse comparée de la praxis de la mondialisation et de celle de l'altermondialisme, tous deux à l'épreuve des faits sur terrain, qui a permis, en définitive, de considérer que dans son combat contre la pauvreté et les inégalités, le monde serait passé de l'utopie à une nouvelle utopie.

Revue de littérature sur les origines socio-économiques et culturelles de la mondialisation

Ce point retrace les aspects socio-économiques et culturels de l'origine de la mondialisation à travers la littérature, l'ambition étant de comprendre d'où vient la mondialisation et quels sont ses enjeux, ses forces et ses faiblesses.

Aux origines socio-économiques et culturelles de la mondialisation

Pour Pascal Lamy, Charles Wyplosz et Steve Charnovitz (2005), l'Internet est l'un des phénomènes à l'origine de la mondialisation. Mais, c'est vers 1971 que les échanges de biens retrouvent, en part du PIB mondial, leur niveau de 1910 et que reprend véritablement la mondialisation économique. La mondialisation économique est ainsi l'accélération, à l'échelle mondiale, des échanges de biens et de services rendue possible grâce à la levée progressive des entraves au commerce dans le cadre de l'accord général sur les tarifs douaniers et le commerce (GATT) puis de l'organisation mondiale du commerce (OMC) depuis 1995. Ces deux organisations traduisent la libéralisation du commerce et la libre circulation des flux économiques à travers le monde. C'est l'effacement des frontières en faveur de ces flux. Cette accélération des échanges visait entre autres l'amélioration de la croissance et par là, la lutte contre la pauvreté dans le monde, dans l'hypothèse que la pauvreté serait due plus à des causes économiques. Ainsi qu'on peut le voir, cette intensification des échanges, des flux commerciaux a également ouvert

le champ à l'interpénétration des cultures. Tout cela a, en effet, préfiguré si pas consacré le slogan de la solidarité mondiale, avec en toile de fond la réduction des inégalités sociales, l'unification des approches d'intervention face aux problèmes qui dérangent la planète, y compris le problème de la pauvreté. La croissance est ici perçue comme la clé de voûte de la lutte contre la pauvreté, et pour qu'il y ait eu croissance, l'approche globale ou holiste a été initiée dans une logique instrumentale.

Toutefois, pour certains analystes, la mondialisation a existé dès le début de l'histoire humaine. Dès l'Antiquité, les différentes civilisations ont développé des routes commerciales, des échanges culturels, elles ont aussi vécu des phénomènes migratoires qui ont contribué à des échanges entre les populations. Ce phénomène de mondialisation s'est poursuivi un peu partout dans le monde au cours de l'histoire, notamment à travers les conquêtes militaires et les grandes explorations. Mais la mondialisation s'est surtout accélérée grâce aux progrès technologiques en matière de transports et de communication. C'est particulièrement depuis la seconde moitié du 20^e siècle que les échanges mondiaux se sont accélérés au point que l'on finisse par employer le terme mondialisation.

La sociologie de Marcel Mauss sur le don au 20^e siècle (1925), la théorie sur la réciprocité de Marshall Sahlins (1983) et le principe de réciprocité chez Karl Polanyi (2007), dégagent également une trace économique de la mondialisation, à travers les échanges dans les sociétés traditionnelles, au goût de la solidarité.

Ainsi, les aspects économiques, financiers, sociaux et culturels de la mondialisation sont cernés pour comprendre sa focalisation sur le problème de la pauvreté et des inégalités dans le monde. Ce faisant, la mondialisation économique suppose le développement des échanges ou des flux commerciaux avec des acteurs transnationaux ; la mondialisation culturelle s'explique par l'interpénétration des réalités culturelles dans toute leur diversité, mais aussi l'émergence d'une supra culture mondialisée.

La circulation de l'information en temps réel, l'interconnexion et l'interdépendance des événements et de leurs conséquences expliquent donc la mondialisation socioculturelle.

Les acteurs de la mondialisation et artisans ou fanatiques de l'approche globale de la résolution des problèmes complexes de l'humanité ont convenu de combattre les inégalités qui avaient structuré le monde en bloc riche et en bloc pauvre. Il y a lieu de cerner la matérialisation de ce discours-promesse dans le deuxième point de cette réflexion, consacré aux promesses et déboires du mouvement dit mondialiste.

Les promesses et les déboires de la mondialisation

Sans claudiquer, Eric Desrosiers (2004) fait remarquer que la mondialisation n'a pas tenu ses promesses, à savoir *la réduction des inégalités*. Au contraire, elle les a aggravées entre les pays, et à l'intérieur même des pays.

Plusieurs actes de formulation de cet objectif de réduction des inégalités et d'unification du monde existent, mais le plus proche et le plus institutionnel se trouve être le Consensus de Washington (1989), qui a ficelé un certain nombre de principes parmi lesquels on en trouve en bonne place ceux qui consacrent le libéralisme ou le capitalisme ultralibéral, la privatisation et la dérégulation (non intervention ou intervention limitée de l'Etat sur le marché) comme des voies meilleures pour procurer le bien être aux peuples et aux Etats ainsi que comme des solutions types à toute forme de crise économique liée à l'endettement. Béatrice Hibou(1999) qualifie ce consensus d'une réelle volonté de « privatiser le monde ».

Dans le cadre du colloque intitulé « Ombres et lumières de la mondialisation » tenu à l'Université du Québec à Montréal 22 au 23 novembre 2004, Albert Berry a à son tour pris la position selon laquelle face aux inégalités, la mondialisation n'a pas tenu ses promesses. Ces assises espéraient entre autres faire le point sur les options qui s'offrent afin de s'assurer que les bénéfices de la mondialisation soient mieux répartis. On peut comprendre par là que la mondialisation possède des bénéfices à son actif, mais que ces derniers sont mal répartis. Cette mauvaise répartition des bénéfices favorise ainsi les inégalités. Cela peut aussi signifier que certaines sociétés auraient arraché des bénéfices de la mondialisation quand d'autres se disent être des perdants. Ça peut paraître normal et de là logique dans toute compétition humaine. Pourtant, le problème se situe au niveau de l'ambition ou de l'ampleur de la promesse : le bonheur pour tous, un monde uni parce que vidé de toute régulation. L'utopie mondialiste commence par là.

La plupart de chercheurs en économie internationale, en sociologie, ... à l'image de James Galbraith, reconnaissent que la difficulté de prouver que cette promesse de la mondialisation n'a pas été tenue est inhérente à l'extrême pauvreté de données statistiques de qualité.

Tout ce qu'on croit savoir est que les inégalités entre pays riches et pays pauvres avaient augmenté depuis le début des années 80, à l'exception de la fulgurante croissance économique de la Chine et de l'Inde. En ce qui concerne l'accroissement ou la baisse des inégalités au sein de chaque pays, les données étaient perçues comme trop contradictoires pour permettre de déterminer une tendance générale.

Fort de nouveaux indicateurs plus fiables et plus détaillés qu'il a mis au point, James Galbraith se dit aujourd'hui en mesure de prouver que les inégalités ont, en fait, augmenté presque partout depuis plus de 25 ans, entre

pays riches et pays pauvres mais aussi entre riches et pauvres dans chaque pays. De façon globale, les inégalités de revenus entre les ménages auraient augmenté partout depuis le début des années 80, après avoir marqué une pause de 1963 à 1971 et avoir même brièvement reculé de 1971 à 1980. Voir les 30 glorieuses, entre 1946 et 1975, période de forte croissance économique et d'amélioration des conditions de vie qu'a connue la grande majorité des pays développés.

Il ya bien des raisons à cette augmentation des inégalités. La mondialisation économique est la mère du néolibéralisme, nouveau visage du capitalisme. Certes, elle ne peut être tenue responsable de tous les maux de la terre. Cependant, la dérégulation en termes de la limitation du rôle de l'Etat sur le marché capitaliste que prône le néolibéralisme aura joué en défaveur de la réduction des inégalités. Et James Galbraith d'ajouter que la principale cause des inégalités demeure l'abandon du système de Breton Wood, la perte de contrôle sur les marchés financiers internationaux qui s'en est suivie et tous les dommages que cela a causés à la stabilité financière et à la souveraineté des Etats. Dans presque tous les pays, il s'observe un contraste dans les grands centres urbains et les milieux ruraux.

L'expertise et les ressources technologiques requises par la nouvelle économie sont concentrées de plus en plus dans quelques centres urbains alors que le reste du pays végète. On continue à assister à l'aggravation des inégalités entre le Sud et le Nord.

La persistance des inégalités et l'aggravation des contrastes a provoqué la colère d'une certaine société civile dite mondiale, organisée mais aussi nébuleuse dans sa structuration.

Examinons les fondements de la colère de la société civile mondiale et la nature de sa structuration dans le troisième point de cet article.

La colère de la société civile mondiale et la conception d'un projet altermondialiste ambitieux

Se rendant compte que la mondialisation exprimée à travers le néolibéralisme n'a pas tenu sa promesse de combattre les inégalités, et considérant qu'à lieu et place elle a fait émerger une oligarchie constituée de seigneurs du capital mondialisé qui sont considérés comme ayant détruit le monde par la mise en place des empires financiers privés dont l'action n'a visé que le profit et la mise à l'écart de l'Etat sur le marché, un groupe composite d'intervenants au sein de la société civile s'est vu exaspéré, révolté

Les griefs à la base de la colère

Jean Ziegler n'en parle pas moins, dans *Les nouveaux maîtres du monde et ceux qui leur résistent* (2002), lorsqu'il soutient qu'au cœur du marché globalisé, banquiers, hauts responsables des sociétés transnationales,

opérateurs du commerce mondial accumulent l'argent, détruisent l'Etat, dévastent la nature et les êtres humains. Ces nouveaux maîtres du monde ce sont les seigneurs du capital financier mondialisé et détiennent d'un grand pouvoir.

Ziegler est révolté par la misère du monde, il est indigné par de profondes inégalités, par la destruction de la planète et par le culte du profit issu de l'idéologie néolibérale. Il dénonce les effets dévastateurs du capitalisme mondialisé.

Daniel Martin (2007) se situe dans le sillage de Ziegler pour expliquer les fondements de la colère ou la phobie du mouvement altermondialiste. Sans prétendre à l'exhaustivité de leur identification, il ya lieu de retenir parmi tant d'autres les griefs suivants :

La dictature des marchés financiers

Les altermondialistes pensent que la finance a été magnifiée au détriment de l'humain et que cette domination de l'humain par la finance est une erreur qu'il faut absolument corriger. Ils culpabilisent le capital et les capitalistes dans le procès des inégalités dans le monde.

Les altermondialistes voudraient *que les entreprises soient gérées dans l'intérêt de leurs salariés, non celui de leurs actionnaires*. La réplique des défenseurs de la mondialisation est que si une entreprise était gérée de cette manière, elle distribuerait plus d'argent à ses salariés et moins à ses actionnaires. Ceux-ci s'apercevraient alors qu'elle est peu rentable, même si ses salariés sont prospères, et placeraient leur argent ailleurs. Privée de ressources en capital, l'entreprise aurait du mal à investir et ses concurrents lui tailleraient des croupières. Au bout d'un certain temps, elle ferait faillite, ses actionnaires auraient perdu leur investissement et ses salariés leur emploi.

La dérégulation généralisée

Les altermondialistes sont opposés à la tendance à la privatisation de la société par les capitalistes à idéologie mondialiste. Le commerce s'est mondialisé avec comme stratégie le démantèlement de l'Etat au profit des lois du marché. Ce démantèlement de l'Etat sur le marché capitaliste est mal perçu et laisse penser à la privatisation de la société-monde.

En guise de réplique, les tenants de la mondialisation avancent que les critiques contre cette dernière ne sont pas fondées si l'on s'en tient à la situation actuelle des pays comme la Chine et l'Inde qui sont farouchement partisans de l'ouverture des échanges, et la Chine a fourni de gros efforts pour devenir récemment membre de l'OMC. D'après les défenseurs de la mondialisation, *ces pays sont ultralibéralistes parce qu'ils y trouvent leur intérêt*.

Les altermondialistes ignorent aussi la prise de position officielle en faveur du libéralisme économique des pays d'Afrique qui ont adhéré au NEPAD (Nouveau Partenariat Africain pour le Développement), programme international basé sur l'ouverture progressive des marchés et l'assistance aux pays qui améliorent leur gouvernance. Les mondialistes démontrent que les pays pauvres qui ont besoin de développement demandent l'ouverture internationale, c'est-à-dire le libéralisme ainsi que la mondialisation.

On le voit, chaque camp est à la défensive et veut accréditer une thèse qui accable l'autre.

Le démantèlement des services publics

Un pays est comme une entreprise: les frais généraux, non producteurs de biens et de services vendables, pèsent sur sa compétitivité; s'il a des frais généraux élevés, il ne peut dégager les ressources financières pour se développer; et faute de développement, il est de moins en moins compétitif et ses concurrents peuvent le battre. Or les frais généraux d'un pays sont ses services publics: éducation, armée, hôpitaux, tribunaux, etc.

Parce qu'elle pèse sur les prix des produits et services et améliore leur qualité, la concurrence est bénéfique à un pays et au niveau de vie de ses citoyens, mais elle exige l'élimination des gaspillages. Pour les altermondialistes, l'Etat cherche à esquiver les dépenses publiques et laisser une place large à la privation. Il est taxé d'irresponsable.

La phobie de l'OMC

Les altermondialistes reprochent souvent à l'OMC de faire le jeu des Etats-Unis et de l'Union Européenne. Ces derniers peuvent s'opposer à une mesure régulatrice sans en subir les conséquences. Les altermondialistes pensent que l'Union européenne et les Etats-Unis se trouvent dans l'égoïsme protectionniste, qui se manifeste par la conclusion des accords commerciaux bilatéraux plus favorables pour eux qu'un accord général ou une règle commerciale internationale commune. Ils sont plus forts dans une négociation avec un pays isolé qu'entre l'ensemble des pays de l'OMC.

En réaction, les mondialistes avancent que la stratégie anti-OMC des altermondialistes est radicale et ne peut pas se justifier dans tous les cas. Par exemple, pour rendre le commerce mondial plus équitable, l'OMC a imposé aux Américains des sanctions qui se chiffrent en milliards de dollars, pour leur politique de taxation des importations d'acier contraire à leurs engagements. Il reste à savoir si cela est suffisant pour convaincre les altermondialistes.

La phobie du FMI

Le Fonds Monétaire International a été chargé d'assurer la régulation du système monétaire international, accordant des prêts aux pays dont la

balance des paiements était en déficit et, au-delà d'un certain seuil, imposant aux pays emprunteurs des politiques de redressement. Le FMI subordonne l'octroi de ses prêts à des mesures d'assainissement des économies endettées, telles que la réduction des dépenses publiques, la vérité des prix, le freinage ou la réduction des salaires et le resserrement du crédit, de manière à réduire les importations et à ralentir l'inflation.

Les fervents défenseurs de la mondialisation croient que le FMI aide ceux des pays qui acceptent de fournir des efforts suffisants pour sortir de leur situation économique désastreuse.

En revanche, les opposants (altermondialistes) accusent le FMI de ne pas se préoccuper de la démocratie ou de droits de l'homme et de soutenir des gouvernements antidémocratiques ou totalitaires en place.

Pourtant, l'attitude du FMI est normale, c'est celle de toute agence ou émanation des Nations Unies, organismes qui ont pour règle (comme l'ONU elle-même) de ne pas agir contre des gouvernements en place et de ne pas se mêler des affaires intérieures d'un pays membre. En somme, le FMI se comporte comme tout banquier: avant de prêter de l'argent, il vérifie la solvabilité de l'emprunteur, pas ses mœurs.

Le remplacement de la concurrence par du commerce équitable

La mondialisation préfère le commerce concurrentiel, tandis que les altermondialistes proposent le commerce équitable. Ce dernier n'enrichit pas les nations, selon les mondialistes. La richesse ne peut se créer que par la concurrence, la liberté d'entreprendre et de faire des bénéfices. Le commerce équitable est une pure utopie pour les défenseurs de la mondialisation. L'entrepreneuriat équitable cache la solidarité et donc il est du ressort des pauvres. Ce commerce où l'homme prime sur le capital n'est pas un gage de l'enrichissement d'après les mondialistes. Or c'est cela que les altermondialistes proposent dans leur volonté d'agir ou d'entreprendre autrement.

La phobie des organismes génétiquement modifiés (OGM)

La plupart des altermondialistes sont "anti-OGM" parce que, pour eux qui sont anticapitalistes, les OGM sont produits par des multinationales et doivent donc être rejetés sans référence à leur utilité. Pourtant, les biotechnologies sont ventées pour leur pouvoir à apporter des éléments des réponses à quelques-uns des grands problèmes de la planète Terre, à savoir la malnutrition, le coût de l'énergie, la pollution, ... (2001).

Les analyses biotechnologiques considèrent la position des altermondialistes quant à ce comme étant a priori de l'absurdité. Les OGM sont des réponses rapides aux problèmes réels exprimés par l'humanité. Les

effets environnementaux des OGM préoccupent également les altermondialistes.

Au total, ces phobies sélectionnées parmi tant d'autres à l'égard de la mondialisation renseignent que cette dernière, en face du spectre de la pauvreté et des inégalités, se trouve accusée de beaucoup de manquements à ses promesses, que ses détracteurs considèrent comme non tenues. Ces derniers font observer que la pauvreté et les inégalités s'observent encore dans presque toutes les sociétés, au risque d'obliger les mondialistes à verser dans la défensive pour montrer que la pauvreté et les inégalités ont toujours existé et existeront toujours.

Les arguments fournis par les mondialistes pour tenter de se défendre contre les altermondialistes ne sont pas insuffisants du point de vue quantitatif. Ils sont de plus en plus multiples et parfois radicaux. Sont-ils aussi suffisants en qualité pour convaincre les détracteurs et les inciter à renoncer à leur projet alternatif ? C'est la question la plus compliquée, mais à laquelle une réponse négative a été déjà trouvée. En effet, les altermondialistes sont très critiques de la mondialisation et ont décidé de la mise en route d'un projet fondé sur un slogan séduisant : « *un autre monde est possible* ». Quel est ce monde ? Empressons-nous à penser que c'est un monde différent de celui promis par la mondialisation à capitalisme ultralibérale. C'est un monde où le capital serait un outil au service de l'humanité et non un monde où l'homme est assujéti par le capital. Bref, **les altermondialistes rêvent un monde à visage humain.**

Cette tendance qui s'est vite transformée en mouvement au sens activiste du terme, a à son tour formulé des promesses. Elles sont cachées dans son slogan sus évoqué. On passe là de promesses de la mondialisation aux promesses de l'altermondialisme. Considérant qu'il n'est pas indiqué de mettre un nouveau vin dans des vieillesalebasses, le projet altermondialiste a dégagé ses propres intentions dont il convient de chercher la pertinence, l'originalité et la légitimité. C'est le contenu du point qui suit.

Les promesses du projet altermondialiste : mythe ou réalité à Bukavu ?

Rappelons que le slogan altermondialiste est « un autre monde est possible ». Ce monde là promis par le projet altermondialiste est un monde où l'homme se trouve mis au centre des préoccupations économiques, sociales et environnementales ; un monde où l'économico- financier n'est pas maître de tout mais un outil au service de l'humanité, un monde où la finance est encadrée dans la vie sociale, un monde où la solidarité remplace la concurrence.

Pour arriver à construire un tel monde, les altermondialistes ont mis en place un paradigme reposant sur des principes et des valeurs qui diffèrent de ceux prêchés par son adversaire qu'est la mondialisation capitaliste. Ces principes et valeurs ont promis de piloter un projet plus éthique aux plans

social, économique et environnemental, et prêcher des valeurs où la primauté de l'homme et l'égalité sont imparables (inéluçtables, assurées) et où le profit se subordonne à l'intérêt de personnes, etc.

La promesse du mouvement altermondialiste est donc de façonner un monde capable de piloter des projets alternatifs, qui visent à réhabiliter l'homme et bâtir un monde à visage humain. Ces ambitions paraissent nobles mais, aux yeux de plusieurs analystes, elles semblent non réalistes, non réalisables.

Ainsi, la contribution scientifique de Michael Lowy (2010) nous apprend que «l'altermondialisme » traduit la solidarité mais avec comme objectif plus large de rechercher des convergences dans la lutte commune contre un adversaire commun qu'est le néolibéralisme.

Alors, quelle société les altermondialistes veulent-ils bâtir et où en est-on dans sa matérialisation au niveau local (Bukavu)?

1. Les altermondialistes veulent une société de type communiste, de type collectiviste, où l'Etat décide et agit pour le bien de tous. S'appuyant sur les expériences du communisme, les mondialistes forment la critique acerbe contre les altermondialistes. Selon eux, l'histoire a montré l'échec total des expériences communistes, dans le domaine économique comme dans celui des droits de l'homme. Elle a produit des peuples misérables et opprimés.

Dans la ville de Bukavu, le communisme n'est pas ce qui intéresse. En réalité, dans cette ville, la collectivisation des moyens de production passe par la solidarité, à travers la ristourne, l'épargne commune et l'exercice des activités économiques communes. On préfère cette mutualisation des risques tout en souhaitant l'émergence d'un Etat responsable face à la pauvreté et aux inégalités. C'est un Etat capable de distribuer tout en régulant. Parler du communisme au sens voulu par les altermondialistes serait une arriération à Bukavu. L'économie planifiée par l'Etat n'est pas préoccupante mais celui qui donne des facilités d'entreprendre. Les gens préfèrent se servir de l'approche associative ou mutualiste dans laquelle la solidarité est reine, au lieu de ce communisme où l'Etat est roi.

2. La plupart des altermondialistes veulent une administration mondiale unifiée, mais à Bukavu, les préoccupations populaires s'éloignent de la forme d'administration à adopter et s'orientent plutôt vers la satisfaction des besoins humains prioritaires. On veut une gouvernance axée sur les résultats et non sur la forme d'administration.

A Bukavu, les organisations qui s'inscrivent dans le courant altermondialiste existent et opèrent. Il s'agit ici des Coopératives d'épargne et de crédit, Mutuelles, Associations et Fondations ; sans omettre les autres

activités de l'économie solidaire telles que les Associations villageoises d'épargne et de crédit (AVEC), la Ristourne et beaucoup d'autres activités exercées dans l'informel mais qui sont fondées sur la solidarité et l'entraide mutuelle entre les membres. Armées contre la pauvreté et les inégalités, ces organisations prônent des principes spécifiques et reposent (théoriquement) sur des valeurs différentes de celles de l'économie capitaliste. Ces principes et valeurs sont entre autres la primauté de l'homme sur le capital, la solidarité, l'égalité, l'autonomie, la libre adhésion, la lucrativité limitée, etc.

Mais, s'ils diffèrent de ceux du capitalisme au niveau de la formulation, remarquons que ces principes et valeurs sont foulés aux pieds par ces mêmes organisations, soucieuses de se créer un encrage sur le terrain. Ce terrain miné par le capitalisme qui y règne en maître depuis la nuit de temps n'est pas automatiquement acquis à l'altermondialisme. L'adversaire y est enraciné et ses principes y sont mieux compris, au centre desquels figure la recherche du profit.

Certes, les promesses du projet altermondialiste sont effarantes, fascinantes, mais basculent inopinément vers la volonté du paradigme adversaire qu'est la mondialisation capitaliste. Jusqu'à nos jours, les promesses du projet altermondialiste sont mitigées, eu égard à la réalité et tel que le montrent les résultats dans les lignes qui suivent. Ceci n'enlève en rien à ce projet ses forces. Il convient d'inventorier ses forces et ses faiblesses et les vérifier davantage dans la réalité à Bukavu.

Forces et faiblesses des promesses de l'altermondialisme au regard de la réalité à Bukavu

Relevé des forces et des innovations du mouvement altermondialiste

Le mouvement altermondialiste s'inscrit en faux contre l'idée de Francis Fukuyama selon laquelle « aucune forme d'alternative à la démocratie de marché n'est désormais envisageable ». Pourtant, ce mouvement constitue des contre-pouvoirs face aux acteurs dominants de la mondialisation, et joue un rôle de « vigie ou sentinelle éthique » dotée d'un pouvoir d'influence.

C'est dans ce cadre précis de rôle joué par l'altermondialisme que François Houtart (2003) trouve que le mouvement altermondialiste a mis en place des cadres de rencontre qui constituent des incubateurs d'idées pour les altermondialistes. Par exemple les Forums Sociaux Mondiaux.

Bien plus, l'auteur constate que ce mouvement contribue soit à l'« humanisation » du marché capitaliste soit à son remplacement par une autre logique. On pense que c'est un mouvement qui a réussi à créer une conscience collective, un fait culturel nouveau à l'échelle du monde. Si ce mouvement n'a pas résolu les problèmes de pauvreté et d'inégalités, il a néanmoins suscité une prise de conscience collective, il a créé un contre-poids réel au capitalisme qui ne doit plus considérer qu'il agit seul sur le terrain.

Certes, à Bukavu, les actions des organisations issues du mouvement altermondialiste ont permis au capitalisme de se repositionner, de se questionner et peut-être de servir mieux que lorsqu'il était seul sur terrain. La recherche de profit par la valorisation de la ressource humaine productive est une innovation dans les entreprises capitalistes. Ce qui étonne est qu'à Bukavu, les organisations issues du mouvement altermondialiste n'ont jamais envisagé l'organisation d'un Forum social local, afin de fédérer et aplanir les zones d'ombres à leur coopération pour une lutte coordonnée contre la pauvreté et les inégalités. Travailler en ordre dispersé favorise la déviation des principes et des valeurs et ce, au profit du capitalisme.

C'est ce que voulait souligner Gabrielle Gérin (2009) en notant que pour certaines ONGs et mouvements institutionnalisés, l'« altermondialisme correspond surtout à une internationalisation de leurs activités. Par la création de liens d'échange et de collaboration avec d'autres organisations équivalentes aux quatre coins du monde, ils espèrent coordonner, solidariser et ainsi renforcer leurs projets de transformation sociale à l'échelle du globe ». Dans cette perspective, le moment clef où se cristallise le processus altermondialiste est le Forum social mondial, espace de réseautage et d'élaboration de stratégies globales entre organisations.

Une autre force de l'altermondialisme est, selon Jacques Gélinas (2008) d'avoir favorisé la reconstruction d'une économie fondée sur le coopérativisme (émergence du coopérativisme) en opposition aux valeurs capitalistes. Le projet altermondialiste a aussi permis de décoloniser notre imaginaire : favoriser la bataille des idées.

L'arsenal de principes et valeurs qui lui sont propres constitue une certaine originalité, mais, dans le contexte de la ville de Bukavu, ces principes et valeurs souffrent d'une grave inapplicabilité, à cause de la déviation qu'en font les acteurs sur le terrain.

Une autre force de cette nébuleuse altermondialiste réside, à en croire Isabelle Sommier (2008), dans sa fluidité et sa souplesse, c'est-à-dire dans la capacité que les groupes ont eu de s'agréger alors même qu'il s'agit d'un espace d'organisation de tradition militante, de modèle organisationnel, aux causes extrêmement diverses, et quelquefois en compétition.

Plusieurs autres penseurs notent que l'altermondialisme est également caractérisé par un engouement renouvelé pour l'action directe et créative, un rejet des modes d'organisation hiérarchiques, ainsi que par le développement de pratiques alternatives du vivre-ensemble social et politique, de production, de consommation et de militantisme basées sur l'horizontalité et l'écologie. Ce mouvement se veut démocratique et démocratisant.

A Bukavu, les membres des organisations de l'économie alternative ou celles de l'économie sociale et solidaire se disent épanouis, considérés au même pied d'égalité, réhabilités et confiants, en vertu du principe de la

démocratie qui doit régner dans ces organisations. Bien que différents les uns des autres, chacun trouve qu'il est égal à chacun, la distance est réduite par la solidarité, peu importe la différence des parts souscrites.

Pour notre part, l'adoption des principes et des valeurs qui diffèrent de ceux de la mondialisation est une force inéluctable de la part de l'altermondialisme. Il se pose plutôt la problématique de l'applicabilité concrète de ces principes et valeurs sur le terrain, en face du capitalisme qui y règne en maître depuis la nuit de temps.

Par ailleurs, avoir favorisé le développement des initiatives collectivement accessibles par des populations exclues du système financier classique est une autre force qu'on ne peut lui enlever. Par exemple, l'accès au crédit par des populations pauvres, la formation et l'apprentissage de la culture d'épargne, le crédit solidaire, etc.

Les faiblesses et les déboires du mouvement altermondialiste

Bien que très ambitieux, le projet alternatif prôné par les altermondialistes revêt un certain nombre de faiblesses ou de limites. Nous les situons aux plans sociologique et téléologique.

a) Au plan sociologique, une grande hétérogénéité, source de désaccords

Les altermondialistes sont faibles parce que divisés, et en désaccord profond dès qu'il s'agit de décisions d'action concrètes.

Cette hétérogénéité entraîne une impossibilité d'accord des divers courants altermondialistes sur des projets d'action concrète. Ils constituent une nébuleuse, difficile à fédérer.

Les altermondialistes sont structurés par rapport à ce qui les rapproche, mais ils constituent une nébuleuse par rapport à leur hétérogénéité au niveau de leur composition sociologique. C'est un mouvement difficile à fédérer.

Cette hétérogénéité et l'absence de cadre de rencontre entre les différentes organisations issues du mouvement altermondialiste font qu'à Bukavu, par exemple, un membre d'une Coopérative x contracte des crédits dans plusieurs Coopératives d'épargne et de crédit, sans se faire remarquer. Les Coopératives n'ont pas de cadre de rencontre pour discuter et ne disposent pas de mécanismes communs pour attraper ces membres turbulents.

b) Au plan téléologique, le système dominant que l'altermondialisme a voulu combattre est toujours présent et domine : C'est le capitalisme mondialisé.

Cette omniprésence du capitalisme de plus en plus fort donne raison à Francis Fukuyama qui soutenait qu'*aucune forme d'alternative à la démocratie de marché n'est désormais envisageable* (Francis Fukuyama, 1992 ; Ludivine Bantigny, 2015).

Et Milton Friedman (1976) abonde presque dans le même sens lorsqu'il soutenait déjà il ya quelques décennies que *le seul caractère social des entreprises est de faire du profit*. Malheur à celles qui auraient eu une finalité autre. Selon cette perspective, le problème de la justice sociale et du développement durable est de la responsabilité de l'Etat et non des entreprises. Le capitalisme comme adversaire déclaré du mouvement altermondialiste opère toujours et encore, parfois sous l'ombre des entreprises dites d'économie sociale œuvrant sous le sillage du capitalisme. Sur le terrain, on note une nette déviation des principes et des valeurs propres à l'économie alternative.

Dans la physionomie de l'économie sociale et solidaire de la ville de Bukavu en RD Congo, il s'observe des contradictions entre valeurs, principes et actions du paradigme alternatif. Plusieurs entreprises relevant du projet altermondialiste ont dévié leurs valeurs au profit de valeurs du capitalisme qu'elles prétendent combattre en tant qu'adversaire. Cela ne peut que faciliter le maintien du système capitaliste. C'est une erreur de stratégie qu'est d'utiliser les principes de l'adversaire pour chercher à le combattre. Si ce n'est pas une erreur, c'est alors une complicité.

La volatilisisation des épargnes, le prélèvement des intérêts sur les capitaux octroyés en termes des crédits, les pénalités en cas de retard de remboursement, la saisie des biens en cas d'insolvabilité,...ne sont pas des actes de la rationalité sociale et solidaire mais bien des actes relevant de la rationalité capitaliste.

Les Coopératives d'épargne et de crédit ainsi que les mutuelles opérant dans la ville de Bukavu ont contredit et fait mentir les principes et valeurs propres à l'économie sociale et solidaire dont le fondement intrinsèque est l'altermondialisme. En effet, les membres de ces organisations socio-économiques qui ont perdu leurs épargnes ne cessent d'organiser des marches de colère et des sit-in à la Banque Centrale du Congo, accompagnés de leurs femmes et des enfants. On observe également des calicots portant des écrits de revendications, sans oublier le mémorandum adressé aux autorités provinciales et nationales, pour exiger que justice soit faite. En réalité, l'altermondialisme n'a pas démantelé le système capitaliste dans la ville de Bukavu ; il a plutôt contribué à sa légitimation. Au fond, les micro entreprises créées à base de l'accès aux services coopératifs sont devenues des créneaux du capitalisme et ne visent pas avant tout à recréer les liens sociaux en termes de solidarité mais à réaliser des profits.

En réalité, sur le terrain, c'est le capitalisme qui se maintient dans plusieurs sociétés, en général, et à Bukavu, en particulier. L'altermondialisme s'est mis à son service.

D'ailleurs, Isabelle Sommier (2008) écrit en regrettant que « Les innovations de l'altermondialisme sont aussi en parfaite adéquation avec le capitalisme que nous combattons ».

A Bukavu, les faits montrent que l'économie altermondialiste n'est qu'une autre façon de faire le capitalisme, c'est une innovation dans le capitalisme et non une alternative au capitalisme.

Toutefois, les sociétés n'ont pas enregistré le même impact de cette nébuleuse altermondialiste. L'économie sociale et solidaire est devenue une réalité planétaire mais son impact se présente en dent de scie ; il est mitigé ou composite. Il ya lieu de croire que l'altermondialisme a un impact à géométrie variable.

Lorsqu'on se réfère à la littérature sur l'apport de l'économie sociale (conséquence du mouvement altermondialiste) au Québec, au Japon, aux USA, en France, dans l'Union européenne, en Inde, ...les alternatives au modèle économique dominant qu'est le capitalisme sont regardées comme ayant apporté une contribution au PIB et à la lutte contre le chômage.

En RDC, en général, et dans la ville de Bukavu, en particulier, au plan formel, les alternatives fonctionnent, mais dans le sillage du capitalisme et sont étouffées par la déviation des valeurs et l'inadvertance de l'autorité de régulation qu'est l'Etat. Les épargnes se volatilisent et les entreprises coopératives tombent en faillite, laissant derrière elles de nouveaux pauvres et de nouveaux chômeurs. Parmi les grandes coopératives d'épargne et de crédit tombées en faillite figurent IMARA, MECREBU, KAWA, TULINDE HAZINA, etc. Remarquons que les deux premières avaient plus de membres que les autres et jouissaient d'une grande popularité et crédibilité avant qu'elles n'aient procédé au détournement des épargnes de leurs membres. Cette faillite est un réel manque à gagner en termes d'emploi et d'opportunité économique.

Eddy Fourgier (2008) soutient que ce courant de contestation du système économique dominant, qui a été incarné par l'altermondialisme, ne triomphera sans doute jamais, mais il ne disparaîtra pas pour autant et continuera certainement à jouer un rôle de contre-pouvoir global face aux principaux pouvoirs économiques. « Ne faut pas enterrer le mouvement altermondialiste et ses idées. Il faut encourager ses acteurs à revenir sur les fondamentaux ».

D'ailleurs, pour nous, il ne devrait plus être question de perdre du temps à chercher l'impossible remplacement du capitalisme, mais de le laisser cohabiter avec d'autres approches alternatives dans la symbiose. La compétition entre acteurs multiples et actifs sur un même terrain n'est plus à regarder de mauvais œil.

Jean Barrea (2007) soutient que « les crises du réel et son éclatement en réels alternatifs ou concurrents, sont propices à l'éclosion de la pensée utopienne [...]».

Ce penseur des slogans et des utopies trouve logique l'éclosion des idées altermondialistes pour frayer le chemin aux alternatives concurrentielles au modèle dominant qu'est le capitalisme mondialisé. L'utopie est donc nécessaire dans la révolution culturelle et sociale et la dynamique du système-monde semble reposer sur l'utopie. Pour nous, il n'est pas vicieux de dire que « je peux faire mieux que celui-là ou de dire que je peux faire comme lui ». Faire comme et avec autrui alors qu'on pense qu'il n'a pas bien fait est une façon de légitimer son système ». C'est une dialectique de reproduction d'hier par aujourd'hui et donc un passé actualisé.

A être contre tout et en plus minoritaires et divisés, les altermondialistes n'obtiendront à peu près rien. Tout juste feront-ils prendre conscience au monde, par médias interposés, que pour progresser, l'homme doit continuer à rêver à un monde meilleur et à la protection de son environnement. En outre, leurs idées seront récupérées par certaines de ces multinationales qu'ils détestent, et qui s'en serviront pour s'attirer sympathie et crédibilité auprès des consommateurs sensibles à ces arguments.

Sans nul doute, il se trouve que l'altermondialisme est passé d'un répertoire réactif à un répertoire proactif. Sa boîte à outils comprend aussi bien des critiques à l'égard de son adversaire déclaré que des propositions auréolées des forces et des faiblesses.

Conclusion

Il se trouve que les excès de la mondialisation étaient devenus insupportables et qu'elle n'a pas tenu ses promesses. Mais, le comportement de l'altermondialisme sur le terrain de la pauvreté ne prouve pas que celui-ci se soit donné le pouvoir de servir d'alternative crédible et efficace. Certes, l'altermondialisme pourrait inciter la mondialisation à s'innover, à s'améliorer, à mieux s'adapter aux nouvelles réalités de terrain, à l'instar d'une majorité politique qui se servirait des projets d'une opposition. A bien des égards, l'altermondialisme est considéré comme étant un capitalisme euphémiste ou atténué.

En conséquence, bien que féconde en idées, l'altermondialisme revêt aussi des allures d'une nouvelle utopie. Certes, nous avons expliqué que son impact est à géométrie variable. Chaque société peut évaluer cet impact par rapport à lui-même, et si on veut, par comparaison aux autres sociétés tout en restant prudente dans le choix des paramètres de cette comparaison.

A Bukavu, les alternatives économiques réfèrent encore au capitalisme, s'y adaptent le mieux, comme si c'était dans leur nature de cohabiter. L'économie sociale se voulant alternative est bien présente et n'a

pas d'autre choix que d'interagir avec l'économie capitaliste qu'elle a pourtant définie comme étant son adversaire. Peut-on combattre son adversaire en empruntant ses principes et valeurs ? C'est de l'utopie, ou à tout le moins, de la complicité.

Néanmoins, empressons-nous de l'admettre, le monde se façonne par l'utopie, il faut rêver pour innover. C'est par l'utopie qu'on peut passer d'un paradigme à un autre et introduire des doutes dans le système dominant. Sans prétendre remplacer la mondialisation ultralibérale de l'économie, le mouvement altermondialiste a démontré que ce système dominant était grossier, imparfait et que donc on pouvait le déstabiliser en entreprenant autrement et avec lui. Les armes que les altermondialistes ont affûtées pour écorner l'image de la mondialisation sont en train d'être affûtées pour démontrer que même l'altermondialisme est une utopie. Si la mondialisation a tort, ce n'est pas non plus l'altermondialisme qui a raison. Tous deux ont trahi chacun, certains de ses serments. Ainsi, le monde est passé de l'utopie à une nouvelle utopie.

References:

1. Barrea, J. (2007). L'altermondialisme à la lumière de la sociologie de l'utopie, Louvain-la-Neuve, Presses universitaires de Louvain.
2. Colloque Ombres et lumières de la mondialisation, Centre d'études sur l'intégration et la mondialisation (CEIM), Montréal 22 au 23 novembre 2004.
3. Desrosiers E. (2004). « Perspectives : Le monde à l'envers », Ledevoir. www.ledevoir.com
4. Fougier E. (2013). « Altermondialisme : contre-pouvoir global ou grande alternative ? », CERISCOPE Puissance, [en ligne], consulté le 08/05/2019, URL : <http://ceriscope.sciences-po.fr/puissance/content/part6/altermondialisme-contre-pouvoir-global-ou-grande-alternative>
5. Fukuyama F. (1992). La fin de l'histoire et le dernier homme, Paris, Flammarion.
6. Gélinas, J. (2008). Dictionnaire critique de la globalisation. Les mots du pouvoir, le pouvoir des mots, Montréal, Ecosociété.
7. Gérin G. (2009). « Potentiels et innovations de l'altermondialisme au Québec : Le Forum social québécois et le campement autogéré », Altermondialisme (automne 2008), forum social québécois.
8. Hibou B. (1999). La privatisation des Etats, Paris, Ed. Karthala, collection Recherches internationales.
9. Houtart F. (2003). Forces et faiblesses de l'altermondialisation, cité dans « Le monde diplomatique », A l'heure du Forum social européen.

10. Lamy P., Wyplosz C. et Charnovitz S. (2005). « Mondialisation et préférences collectives : la réconciliation ? » Site web : www.possibles.cam.org
11. Löwy M. (2010). « Négativité et utopie du mouvement altermondialiste », La brèche numérique.
12. Ludivine Bantigny (2015). « La fin de l'histoire n'aura pas lieu, écrire l'histoire ».
13. Martin D. (2007). « Altermondialisme : une analyse critique », Site personnel de Daniel Martin.
14. Moisan J.-P. (2001). « Génétique, trop de craintes irraisonnées », Le Figaro.
15. Plihon Dominique (2008). « L'altermondialisme, version moderne de l'anticapitalisme ? », dans Actuel Marx.
16. Sahlins, M. (1983). La redistribution, Cambridge University Press.
17. Servet J.-M. (2007). « Le principe de réciprocité chez Karl Polanyi, contribution à une définition de l'économie solidaire », Revue Tiers monde, n° 190.
18. Sommier I. (2008). Altermondialisme : ses acquis et ses limites.
19. Tremblay J.-M. (2008). « L'altermondialisme : une utopie créatrice », Revue Possibles, 5070, Rue de Lanaudière, Montréal (Québec), H2J 3R1.
20. Zaki Laïdi, (2006). La Grande Perturbation, Paris, Flammarion.
21. Ziegler J. (2002). Les nouveaux maîtres du monde et ceux qui leur résistent, Paris, éditions seuil.



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Estimation De l'Effet « Effectifs Des Classes » Sur l'Efficacité Des Etablissements Techniques Supérieurs Privés En Côte d'Ivoire

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Résumé

Cette étude a examiné les relations entre « les effectifs des classes » des établissements privés formant au Brevet de Technicien Supérieur (BTS) en Côte d'Ivoire et l'efficacité desdites structures de formation. En effet, outre les ressources de l'école, de nombreux chercheurs s'intéressent à la problématique de la taille des classes. Toutefois, leurs résultats sont souvent contrastés. Pour collecter les données de l'étude, deux instruments ont été utilisés : un questionnaire-enseignants et chefs d'établissements sur les effets de la diminution du nombre d'étudiants dans les classes et une grille d'observation des établissements au sein de 63 établissements. La technique d'analyse des données est celle des modèles multi-niveaux. Les chercheurs sont parvenus aux résultats qu'avec les filières tertiaires, il existe une certaine homogénéité dans le comportement des établissements et que la contribution des « effectifs réduits des classes » au succès sans redoublement des étudiants est significative. Avec les filières industrielles, l'on note tantôt une certaine homogénéité, tantôt le modèle « effets fixes » dans l'estimation de l'effet « effectif-classe ». Dans tous les cas, l'on retient que « les effectifs des classes

» sont essentiels pour l'efficacité des établissements. Aussi, en regard de l'intensité de la relation qui varie plus ou moins selon les filières, la présente étude propose-t-elle aux autorités ministérielles d'imposer non seulement un seuil d'ouverture des classes, mais aussi une architecture des établissements qui permettraient de meilleures conditions de travail.

Mots-clés: Effet, Effectifs Des Classes, Efficacité Des Établissements

Estimation Of The "Class Size" Effect On The Efficiency Of Private Higher Technical Schools In Côte d'Ivoire (Ivory Coast)

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Abstract

This study examines the relationship between "class sizes" of higher vocational schools for the Technical Education High School Diploma (BTS) in Côte d'Ivoire and the effectiveness of these vocational schools. In fact, in addition to school resources, many researchers are more specifically interested in the issue of class size. Two instruments were used to collect data: a questionnaire for teachers and heads of schools and an observation within 63 private higher vocational schools. The method of data analysis is that of multi-level models. The results indicated that with tertiary streams, there is a certain homogeneity in the behaviour of institutions and that the contribution of "small class sizes" to student success without repeating a year is significant. With the industrial sectors, there is sometimes a certain homogeneity; sometimes it is the "fixed effects" model which is favoured in the estimation of the "class-size". The bottom line is that "class sizes" are essential for the efficiency of schools. Also, in view of the intensity of the relationship which varies more or less according to the streams, this study proposes to the educational authorities to implement a threshold of opening of classes and an architecture of the higher vocational schools, which would allow better working conditions.

Keywords: Effect, Class Size, School Efficiency

Introduction

Les travaux récents en éducation révèlent que l'évaluation des établissements scolaires constitue de plus en plus un enjeu important dans plusieurs pays (Dumay, 2004; Lee, 2000; Reynolds, Teddlie, Creemers, Scheerens & Townsend, 2000; Rowe, 2003; Rutter & Maugham, 2002). En effet, Vezeau, Chouinard, Bouffard, Janosz, Bergeron et Bouthillier (2010) expliquent que les divers établissements scolaires se discriminent soit par des facteurs internes aux établissements mêmes (effectifs des classes, qualité des enseignants, matériels didactiques d'appui à la formation...) soit par un ensemble de facteurs externes à l'école (compétences initiales des élèves, niveau d'éducation de leurs parents, niveau socioéconomique, etc.).

Par ailleurs, Galton, Hargreaves et Pell (1996) révèlent que la qualité de l'enseignement et la réussite des élèves sont généralement meilleures dans les classes plus petites en effectifs car les élèves sont sollicités plus souvent, ils ont davantage de contacts avec l'enseignant, davantage de temps est passé sur les tâches d'enseignement plutôt que sur la gestion de classe et les élèves reçoivent plus de rétroaction de la part de l'enseignant. Il s'en suit que les effectifs des classes contribuent à l'efficacité des établissements.

Cependant, Piketty (2004) relève un contraste entre les conclusions des recherches sur le sujet. En outre, le chercheur révèle l'existence de discussions sur la validité des résultats des études expérimentales par rapport aux études non expérimentales. Meuret (2001a ; 2001b) ajoute que le débat se mène aussi sur la comparaison de la taille des échantillons, des procédures et des instruments d'analyse. Les contradictions n'épargnent pas la recherche de variables explicatives non contrôlées pouvant masquer ou modifier le lien entre la mesure et les résultats. Sur ce point, notons par exemple le salaire des professeurs (Peevely, Hedges & Nye, 2005), la taille de l'école (Roellke, 2003), les solutions alternatives telles que la diminution du ratio d'élèves par enseignant ou sur celle du ratio enseignant-élèves par classe (Sharp, 2003). Il y a aussi la formation des enseignants (Blatchford, 2007).

Par ailleurs, la majorité des études sur la question concernent l'école primaire et quelques-unes s'étendent sur le secondaire. Cette insuffisance d'études d'un impact dépassant la fin de l'école primaire ou dans d'autres matières que la langue maternelle et les mathématiques, empêche à l'heure actuelle tout transfert ou toute généralisation des résultats (Deutsch, 2003).

Au surplus, il reste encore beaucoup d'inconnues, notamment sur l'articulation entre la réduction de la taille des classes et les pratiques pédagogiques. Pourtant, il est admis que les établissements scolaires réalisent leurs missions à travers ses pratiques pédagogiques d'où notre préoccupation de savoir si la variable « effectifs des classes » contribue à l'amélioration de l'efficacité des établissements scolaires notamment ceux formant au Brevet de Techniciens Supérieur (BTS) en Côte d'Ivoire. En outre, la littérature reste

muette sur cette problématique. Dans la pratique, en Côte d'Ivoire, les programmes de formation au Brevet de Technicien Supérieur (BTS), prescrivent que les établissements doivent disposer de quinze postes de travail pouvant accueillir chacun deux étudiants au maximum. Cela suppose que les établissements ne peuvent constituer des classes de plus de trente (30) étudiants. Cependant, les autorités ministérielles ont admis pendant les évaluations des établissements supérieurs privés formant à ce diplôme la normalité de classes de quarante (40) étudiants. Il s'agit d'une situation de fait. Sur cette base, nous estimons qu'une classe normale en Côte d'Ivoire, doit compter entre trente et quarante élèves. Autrement dit, une classe dont l'effectif est supérieur à quarante élèves est considérée comme pléthorique.

Au regard de tout ce qui précède, l'on peut admettre avec Milesi et Gamoran (2006), que les études sont contradictoires, non définitives et peu généralisables, ce qui permet d'admettre des points de vue divergents. C'est pourquoi, cette préoccupation, suscite pour nous la question suivante: « pour améliorer l'efficacité des établissements formant au BTS, la réduction de l'effectif des classes est-elle plus rentable que d'autres politiques telles que le perfectionnement professionnel des enseignants, un soutien plus accru de l'Etat pour équiper les établissements ou la réforme des programmes de formation ? ». Pour répondre à cette question, il convient d'isoler la part attribuable aux effectifs pratiqués dans les écoles dans la réussite des élèves.

Notre étude vise spécifiquement à estimer l'ampleur de l'effet « effectifs des salles de classe » sur l'efficacité des établissements formant au Brevet de Technicien Supérieur (BTS) en Côte d'Ivoire. Pour ce faire, cet article part de l'hypothèse que « *les effectifs inférieurs à 25 étudiants par classe influent significativement sur les taux de réussite sans redoublement des étudiants aux examens du BTS en Côte d'Ivoire.* »

À travers l'évaluation des établissements, un certain nombre de théories sur l'efficacité de l'enseignement (évaluation des apprentissages), de l'organisation et de la gestion (des établissements, des politiques éducatives, etc.) sont mis à jour (Coulidiaty-Kielème, 2006). La théorie des organisations et les théories économiques du choix public ou (Public choice) peuvent nous aider à fonder l'évaluation de l'efficacité des établissements.

Matériels et Méthode

Cette étude porte d'abord sur la découverte de relations entre des facteurs ou des variables (effectifs des classes et efficacité des établissements). Ensuite, elle consiste à mesurer la relation entre eux. Il s'agit donc d'une étude descriptive-corrélacionnelle. Des analyses statistiques peuvent être utilisées pour déterminer l'existence de relations possibles entre les variables.

Dans cette étude, il ne s'agit pas simplement de comparer les étudiants scolarisés dans les « petites » et les « grandes » classes pour mesurer l'impact

de la taille des classes sur l'efficacité des établissements. Une telle comparaison peut en effet, être faussée par de multiples biais de sélection. C'est pourquoi, nous avons choisi d'utiliser une méthode qui permet de réduire, voire de totalement corriger ces biais. Pour se faire, la méthode dite « Seuils d'ouverture des classes » a été privilégiée pour des raisons pratiques. Elle consiste à définir un seuil de l'effectif des élèves (par exemple 40 , 55 , 60 , 70... élèves par classe) au-delà duquel l'ouverture d'une autre classe s'impose aux autorités de l'établissement induisant une diminution « exogène » de la taille moyenne des classes d'un niveau donné en fonction du nombre total d'inscrits dans ce niveau. En comparant les élèves scolarisés dans des écoles dont les effectifs sont situés juste au-dessus et juste en-dessous des seuils d'ouverture de classes, cette variation quasi-aléatoire permet de mesurer l'effet causal de la taille des classes sur les performances scolaires. Ainsi, pour cette étude, le tableau 1 nous définit les variables indépendantes.

Tableau 1. Définition des variables indépendantes

VARIABLES	MODALITES	INDICATEURS
Les effectifs des classes	Classes à effectifs pléthoriques	Nombre d'étudiants supérieur à 40 par classe
	Classes à effectifs moyens	Nombre d'étudiants compris entre 30 et 40 par classe
	Classes à effectifs réduits	Nombre d'étudiants inférieur à 30 par classe

Dans le souci de définir une performance de référence qui, somme toute peut paraître subjective, nous avons choisi de nous référer aux résultats couramment rencontrés dans la littérature scientifique. Sur ce point, dans la revue de la littérature, nous avons fait le point des résultats de plusieurs recherches. Toutefois, nous avons pu constater qu'elles ont été menées dans des contextes bien précis en dehors du nôtre. Celles qui semblent couvrir un espace géographique plus important sont celles de Scheerens et Bosker (1997). En effet, dans leur méta-analyse portant sur plus de 150 recherches menées en Europe, en Amérique du Nord, en Australie et dans certains pays du Tiers-Monde, Scheerens et Bosker (1997) ont montré que les variations entre les établissements scolaires expliquent environ 20 % de la variance dans le rendement des élèves (pour une taille d'effet d'environ 0,48; ce qui est considéré comme un effet substantiel). Cependant, lorsque l'effet lié aux différences initiales dans la force des élèves est pris en compte, l'effet propre associé à l'école n'est que de 8 % environ (pour une taille d'effet de 0,30). Nous avons donc choisi de prendre ces valeurs comme référence pour évaluer nos établissements. Ainsi, les indicateurs retenus pour mesurer nos variables expliquées sont ceux présentés dans le tableau 2 :

Tableau 2. Définition des variables dépendantes

VARIABLES	MODALITES	INDICATEURS
Résultats généraux par filière des étudiants aux examens de fin de formation au BTS	Impact fort	L'effet associé aux variables explicatives explique plus de 20 % de la variance dans le rendement des étudiants (pour une taille d'effet supérieur à 0,48)
	Impact moyen	L'effet associé aux variables explicatives explique 20 % de la variance dans le rendement des étudiants (pour une taille d'effet d'environ 0,48)
	Impact faible	L'effet associé aux variables explicatives explique moins de 20 % de la variance dans le rendement des étudiants (pour une taille d'effet inférieur à 0,48)
Résultats sans redoublement par filière des étudiants aux examens de fin de formation au BTS	Impact fort	L'effet associé aux variables explicatives explique plus de 8 % de la variance dans le rendement des étudiants (pour une taille d'effet supérieur à 0,30).
	Impact moyen	L'effet associé aux variables explicatives explique 8 % de la variance dans le rendement des étudiants (pour une taille d'effet de 0,30).
	Impact faible	L'effet associé aux variables explicatives explique moins de 8 % de la variance dans le rendement des étudiants (pour une taille d'effet inférieure à 0,30).

À partir de ce tableau 2, l'hypothèse sera dite confirmée, si l'on estime à plus de 8 % la variance du rendement des étudiants (pour une taille d'effet supérieur à 0,30) des établissements pratiquant des effectifs inférieurs à 25 étudiants par classe aux examens du BTS contrairement aux étudiants des autres établissements à classes pléthoriques.

Dans cette investigation, nous avons utilisé une combinaison de méthodes quantitatives et qualitatives, tel que Gage l'a proposé en 1986. Selon ce chercheur, dès que les objectifs d'une étude deviennent la compréhension d'un phénomène et la recherche de généralisations, une combinaison entre recherches qualitatives et recherches quantitatives est concevable et même tout à fait souhaitable.

Pour déterminer la taille de notre échantillon, nous avons eu recours à la table d'estimation de la taille d'un échantillon adaptée de Krejcie et Morgan (1970). Sur cette base des informations ont été collectées au sein de 63 établissements à l'aide d'une grille d'observation des établissements et avons interrogé 269 enseignants grâce à un questionnaire-enseignants et chefs d'établissements relatif à la diminution du nombre des élèves (dné). En réalité, il s'agit d'un questionnaire adapté du questionnaire conçu par les Universités de Sherbrooke et de Montréal sur la diminution du nombre d'élèves dans les classes. C'est un instrument qui permet de réunir des informations sur le portrait des retombées de la mesure de la diminution du nombre d'étudiants dans les classes formant au BTS, les conditions d'implantation de la mesure de diminution du nombre d'étudiants dans les classes et une évaluation globale de l'importance de la mesure de diminution du nombre d'étudiants

dans les classes. Il est aussi prévu dans ce questionnaire une partie pour faire des commentaires sur les procédures pour constituer les classes à chaque rentrée, sur les techniques utilisées pour répartir les étudiants dans les classes, sur les attitudes éventuelles de certains enseignants pour l'accueil de certains étudiants et sur des éventuelles différences dans les difficultés d'enseigner à certains niveaux qu'à d'autres. L'échantillonnage aléatoire simple a servi pour le choix des établissements à visiter ainsi que les chefs d'établissements à interroger.

Le plan d'analyse des données quantitatives est basé sur les régressions. L'étude s'est basée sur la fonction de production du système éducatif qui permet de mettre en relation les facteurs de production (inputs) que sont « les effectifs des classes » aux sorties (outputs) ou résultats aux examens du BTS en vue d'apprécier l'efficacité du processus de transformation. Afin de faciliter le traitement, les données quantitatives sont traitées statistiquement par le logiciel STATA. Ce logiciel intègre dans un environnement unique un jeu complet de fonctions statistiques et graphiques, de gestion des données, et un langage de programmation. Il peut faciliter la gestion de nos variables. Quant aux données qualitatives, elles sont analysées par les techniques d'analyse de contenu. D'une façon générale, le type d'analyse de contenu privilégié est l'analyse de contenu thématique catégorielle. Aujourd'hui, ces données se traitent avec des outils informatiques et l'étude a employé le logiciel STATA pour les traiter. Pour ces données qualitatives, on utilise généralement deux types de fonction : la fonction de répartition de la loi logistique et la fonction de répartition de la loi normale centrée réduite. A chacune de ces fonctions correspond un nom attribué au modèle ainsi obtenu: modèle logit et modèle probit. Le modèle de régression utilisé dans cette étude est le modèle de régression probit.

L'étude présente quelques limites inhérentes aux choix méthodologiques. En effet, les chercheurs de la présente étude ont choisi de couvrir trois années académiques récentes, ce qui ne permet pas de conclure que les valeurs moyennes de puissance observées sont ponctuelles ou sont une caractéristique des recherches contemporaines en éducation. À tout le moins, on peut penser qu'un intervalle de temps plus étendu inclurait davantage d'observations et permettrait de mieux préciser la tendance...

Par ailleurs, d'un point de vue théorique, le choix de l'échantillon d'établissements pour cette étude n'a pas tenu compte de la disparité de contextes entre les établissements. Pourtant, il semble bien que les processus managériaux et pédagogiques développés dans les établissements scolaires sont indexés par le public qui les compose dans le sens où les directeurs d'établissement adapteraient leur organisation de l'école en fonction du public auquel ils s'adressent et où la qualité et la quantité de l'instruction seraient moins favorables dans des contextes scolaires désavantagés (Thrupp, 1999 ;

Gewirtz, 1998 ; Van Zanten, 2001 ; Opdenakker & Van Damme, 2001 ; Duru-Bellat et al., 2004 ; Lupton, 2004).

Au plan pratique, il apparaît que les fuites souvent constatées lors des examens nationaux , les difficultés d’organisation des épreuves pratiques et des projets aux examens du BTS et la falsification du diplôme sont l’expression de quelques faiblesses par lesquelles l’organisation du BTS reconnaît ses échecs. Cet état des faits invite à une interrogation majeure : À partir des résultats enregistrés par les établissements aux examens du BTS, jusqu’à quel niveau peut-on estimer ceux effectivement imputables aux effets-écoles ? Aux effets-classes ? Aux effets-maitres ? En tout état de cause, ces considérations d’ordre éthique et organisationnel restent une préoccupation qui peut franchir le seuil d’erreur admis par nos modèles d’estimation de la valeur expliquée par les variables indépendantes.

Résultats

Ce sont parmi les 27 filières de formation qui reçoivent les affectés de l’Etat que les chercheurs ont choisi celles satisfaisant aux contraintes des données en panel cylindrique. Le principe de base des données en panel cylindrique étant de suivre à chaque date toutes les unités (pas d’absence de données à l’une des sessions des examens) dans un espace donné (c’est-à-dire les établissements techniques supérieurs privés formant au BTS). Sur cette base, nous avons décelé quatre(04) filières tertiaires et trois (03) industrielles. Ce sont pour la première catégorie les filières FCGE, GEC, RHC et LOG. Pour la deuxième catégorie, il y a les filières IDA, RIT et SEI.

Les informations de la grille d’observation indiquent que la variable « effectif des classes » comprend le nombre d’effectifs <30 ; le nombre d’effectifs compris entre 30 et 40 ; et le nombre d’effectifs > 40.

Le calcul des coefficients de corrélation entre les variables explicatives montre que lesdites variables sont disjointes et peuvent donc servir à expliquer les pourcentages de réussite généraux et les pourcentages de réussite sans redoublement. Les résultats statistiques relatifs à la variable « effectifs des classes » et issus de la grille d’observation des établissements sont consignés dans le tableau 3.

Tableau 3. Présentation statistique des variables en fonction des filières

Variables	Filières	Nombre Observations	Moyenne	Ecart Type	Minimum	Maximum
Effectif par classe	FCGE	171	2.315789	.8005416	1	3.
	GEC	153	2.084967	.8267542	1	3
	RHC	117	2.393162	.7982445	0	3
	LOG	42	1.642857	.7908448	1	3
	IDA	78	2.012821	.9186889	1	3
	RIT	36	2.472222	.8101538	0	3.
	SEI	33	1.787879	1.166125	1	3

Légende :

FCGE: Finance Comptabilité et Gestion des Entreprises; **GEC:** Gestion Commerciale; **RHC:** Ressources Humaines et Communication; **LOG:** Logistique; **IDA:** Informatique-Développeur d'Applications; **RIT:** Réseau Informatique et Télécommunication; **SEI:** Systèmes Electroniques et Informatiques.

La variable explicative a été observée 171, 153, 117, 42, 78, 36 et 33 fois respectivement pour les filières FCGE, GEC, RHC, LOG, IDA, RIT et SEI. Cette information est importante pour la validité de l'étude d'autant plus qu'il est indispensable d'obtenir au moins 30 observations de la variable explicative pour rendre valide les résultats issus de l'étude de ladite variable. Dans ce cas-ci, cette exigence est satisfaite.

Quant aux variables explicatives du questionnaire destiné aux enseignants et chefs d'établissements sur la taille des classes, après avoir déterminé les corrélations entre elles, la présente étude a retenu les suivantes : "Augmentation de la performance dans les matières académiques", "Augmentation du temps consacré à l'enseignement", "Collaboration accrue avec l'équipe-cycle", "Augmentation des dépassements d'étudiants dans les classes", "Grande réussite des étudiants" et "Mesure généralisée dans toutes les classes supérieures".

Le calcul des variables composite est basé sur la moyenne des différentes variables corrélées. Les résultats issus de la grille d'observation des établissements sont présentés dans le tableau qui suit :

Tableau 4. Synthèse des résultats de la grille d'observation

	SANS EFFETS		EFFETS FIXES		EFFETS ALEATOIRES		CONCLUSION
	PG (taille d'effet)	PS (taille d'effet)	PG (taille d'effet)	PS (taille d'effet)	PG (taille d'effet)	PS (taille d'effet)	
FCGE	+0,53	-	-	-	-	+0,26	IMPACT FAIBLE
GEC	-2,46	-	-	-4,17	-	-	IMPACT FORT
RHC	+2,56	+0,52	-	-	-	-	IMPACT FAIBLE
LOG	-0,81	+2,94	-	-	-	-	IMPACT FAIBLE
IDA	+6,15	+4,64	-	-	-	-	IMPACT FORT
RIT	-	-4,09	+2,00	-	-	-	IMPACT FORT
SEI	-	-	+6,54	-1,12	-	-	IMPACT FAIBLE

Il ressort du tableau 4 que c'est en GEC, IDA et RIT que l'étude a enregistré des tailles d'effet supérieur à 0,3 à un seuil de confiance inférieur à 0,1. En conséquence, pour les données de la grille d'observation, c'est en

GEC, IDA et RIT que l'impact de la taille des classes s'est révélé pertinent. Ce sont donc dans ces filières que l'hypothèse est confirmée.

Quant aux données collectées avec le questionnaire-enseignants et chefs d'établissement sur la DNE, le tableau suivant donne les estimations probit des pourcentages.

Tableau 5. Synthèse des résultats du questionnaire-enseignant et chefs d'établissements

	ESTIMATION PROBIT DES POURCENTAGES		CONCLUSION
	PG	PS	
FCGE	00,15	02,58	IMPACT FAIBLE
GEC	14,76	42,44	IMPACT FORT
RHC	1,4	09,58	IMPACT FORT
LOG	05,62	21,34	IMPACT FORT
IDA	01,49	01,34	IMPACT FAIBLE
RIT	07,78	38,64	IMPACT FORT
SEI	06,85	-	

Selon les informations contenues dans ce tableau, les enseignants et chefs d'établissements évaluent à plus de 8% la contribution des effectifs réduits des classes au succès sans redoublement en GEC, RHC, LOG et RIT.

Discussion

L'étude montre qu'en FCGE et GEC, la notion d'effectif des classes transparait implicitement par le ratio « nombre d'étudiants sur le nombre de postes de travail ». Autrement dit, la variation des tailles des classes peut modifier significativement le « nombre d'étudiants par poste de travail ». Pour d'autres filières comme RHC et LOG, les leviers sur lesquels les établissements font varier les pourcentages sont essentiellement les effectifs des classes et le nombre de postes de travail. Cela se réalise principalement en RHC par le biais des variables « nombre d'étudiants par poste de travail » la variable composite « REUS » et celle « 'Collaboration accrue avec l'équipe-cycle ». Quant à la filière LOG, toutes les variables sont significatives à divers degrés. En ce qui concerne les filières industrielles (RIT, IDA et SEI), la variable « effectif des classes » s'est révélée déterminante dans l'explication des pourcentages de réussite aux examens du BTS. A cet effet, l'explication demeure la même : la nature industrielle de la filière et ses contraintes justifie la part belle faite à cette variable dans l'explication des pourcentages obtenus aux examens par les établissements.

Ces conclusions attestent ce qui a été déjà relevé dans la littérature, notamment l'idée que la qualité de l'enseignement et la réussite des élèves sont généralement meilleures dans les classes plus petites car les élèves sont sollicités plus souvent, ils ont davantage de contacts avec l'enseignant, davantage de temps est passé sur les tâches d'enseignement plutôt que sur la

gestion de classe et les élèves reçoivent plus de rétroaction de la part de l'enseignant (Galton, Hargreaves et Pell, 1996). Slavin (1989) ajoute que la réduction du nombre d'élèves par classe aussi reconnu sous le vocable de Diminution du Nombre d'Elèves (DNE) permet d'attirer et de retenir les bons enseignants, de rendre les enseignants plus réceptifs à l'innovation et contribue à faire en sorte que l'école soit perçue comme supportante.

En effet, les résultats des recherches de psychologie différentielle et de psychosociologie (Bru, 1992) ont montré que selon les circonstances, un même individu pouvait avoir des conduites d'apprentissage différentes (variabilité intra-individuelle). De même, à l'intérieur du groupe-classe, on peut noter des différences qui démontrent une variabilité interindividuelle : des écarts de développement importants entre élèves, des différences entre sujets quant au mode d'appréhension et de traitement de l'information (styles cognitifs), la diversité des représentations du savoir, de l'école et de l'apprentissage, la multiplicité des caractéristiques psychoaffectives (attitudes, persévérance, motivation, styles relationnels, etc.).

Toutefois, il convient de relever que les études évoquées dans la littérature tendent à porter sur un territoire de compétences réelles ou plusieurs, où la réduction de l'effectif des classes a été mise à l'essai et elles examinent les preuves d'une amélioration des résultats des élèves. Ces études s'intéressent aussi à d'autres mesures telles que les taux d'obtention du diplôme de fins d'études secondaires (Sharp, 2002) et les taux de grossesse et d'incarcération (Krueger & Whitmore, 2002). Dans certains cas, les recherches tiennent compte de caractéristiques démographiques des élèves telles que la « race » et la situation socioéconomique afin de constater comment les élèves faisant partie de groupes traditionnellement sous-performants se comparent aux élèves bénéficiant de plus d'avantages sociaux et économiques (Blatchford, Goldstein, Martin & Browne, 2002; Reichardt, 2001). Les chercheurs de cette étude conviennent que son efficacité est accrue au primaire (de la maternelle à la troisième année).

À la lumière de ce qui précède, on note l'existence de divergences vis-à-vis de la présente étude. D'abord au niveau du territoire de compétence, ensuite au niveau de la prise en compte des caractéristiques sociodémographiques des étudiants. Partant de ce fait, il faut admettre que la littérature porte en elle une insuffisance d'études d'un impact dépassant la fin de l'école primaire ou dans d'autres matières que la langue maternelle et les mathématiques et cela empêche à l'heure actuelle tout transfert ou généralisation des résultats comme le dit Deutsch(2003).

Jusqu'ici, l'étude s'est limitée à mesurer la force des relations entre les « effectifs des classes » et l'efficacité des établissements formant au BTS en Côte d'Ivoire. La mesure de l'efficacité a pris en compte les étudiants tout azimut sans spécifier les séries des Baccalauréats obtenus. Nous osons croire

qu'une recherche sur l'efficacité des établissements de type BTS qui prendrait en compte les séries des Bac et les filières d'étude aurait une double implication : d'abord elle aiderait à se prononcer avec plus d'objectivité sur l'orientation des étudiants dans les filières de formation en fonction de leur profil, ensuite elle aidera à apprécier en connaissance de cause la durée des formations en fonction des filières et des séries de Bac des étudiants.

Ainsi l'étude recommande aux autorités de proposer voire même imposer aux fondateurs une architecture des établissements qui permettrait de meilleures conditions de travail (aération des salles, éclairages) tout en limitant les capacités des salles à quarante (40). Concernant la capacité des salles de cours, notre recherche vient de montrer que les établissements qui constituent des classes dont les effectifs sont inférieurs ou égaux à quarante offrent plus de chance de succès à leurs étudiants. Par ailleurs, les effectifs des classes doivent tenir compte du nombre de postes de travail opérationnels de sorte à installer un étudiant par poste ou dans une moindre mesure deux. En fonction de la complexité de l'activité d'apprentissage, on pourrait limiter le nombre de postes de travail par salle à dix ou à vingt selon qu'il y ait deux ou un étudiant par poste. Dans ce cas les effectifs des classes seraient limités à vingt (20).

Conclusion

Pour conclure, disons que la variable « effectif des classes » transparaît tantôt explicitement, tantôt implicitement comme une variable pertinente dans l'efficacité des établissements techniques supérieurs privés en Côte d'Ivoire. Mais à bien considérer les choses, l'intensité de la relation varie plus ou moins selon les filières. Il semble bien que pour l'enseignement de certaines matières, on puisse être efficace avec des groupes nombreux, alors que dans d'autres, il faille travailler avec des groupes beaucoup plus restreints (Michaud, 1981). C'est d'ailleurs l'opinion du National Education Association au Canada qui s'est intéressé à ce problème au cours des années soixante. Il ne faut pas toutefois sous-estimer que notre travail a le mérite de porter la question au niveau d'une population ayant dépassé les niveaux préscolaire, primaire et secondaire comme l'ont fait les études antérieures. De plus, cette étude permet de formuler des restrictions aux nouvelles pratiques pédagogiques où les TIC semblent trouver la solution à la massification dans l'enseignement supérieur en Afrique.

Du reste, il y a certainement plus d'une leçon à tirer des résultats de la présente recherche et le chemin demeure encore long pour la quête de la qualité de l'enseignement. En définitive, il faut admettre ici que les chances de progression des étudiants dépendent bien de leur environnement scolaire dont les effectifs des groupes-classe.

References:

1. Addonizio, M.F., & Phelps, J.L. (2000). La taille des classes et le rendement des élèves: Un cadre pour policy analysis. *Journal of Education Finance*, 25 (2), 135-156. l'analyse des politiques. *Journal of Educational Finance*, 26(2), 135-156.
2. Allen, J., & Lynd, C. (2000). *Debunking the class size myth: How to really improve teacher effectiveness*, Washington, DC, Center for Education Reform.
3. Biddle, B.J., & Berliner, D.C. (2002). Small class size and its effects, *Educational Leadership*, 59, (5), 12-23.
4. Blatchford, P., Russell, A., Bassett, P., Brown, P., & Martin, C. (2007). The Effect of Class Size on the Teaching of Pupils Aged 7-11 Years. *School Effectiveness and School Improvement*, 18(2), 147-172.
5. Blatchford, P., & Mortimore, P. (1994). The issue of class size for young children in schools: What can we learn from research? , *Oxford Review of Education*, 20(4), 411-428.
6. Blatchford, P., Goldstein, H., Martin, C., & Browne, W. (2002). A study of class size effects in English school reception year classes In *British Educational Research Journal*, vol. 28(2), 167-185.
7. Couliadiaty-Kielème, J. (2006). Les facteurs déterminants de l'efficacité pédagogique des établissements secondaires, une analyse critique de l'échec scolaire au Burkina Faso. Thèse soutenue pour l'obtention du titre de Docteur de l'Université de Bourgogne tome I.
8. Deutsch, F. M. (2003). How Small Classes Benefit High School Students. *NASSP Bulletin*, 87(635), 27-44.
9. Finn, J.D. (2002). Small classes in American schools: Research, practice and politics, *Phi Delta Kappan*, 83(7), 551-560.
10. Folger, J., & Breda, C. (1989). Evidence from project STAR about class size and student Achievement. *Peabody Journal of Education*, 67(1), 17-33.
11. Galton, M., Hargreaves, L., & Pell, A. (1996). *Class Size, Teaching and Pupil Achievement*, Hamilton House, National Union of Teachers.
12. Gewirtz, S. (1998). Can all schools be successful? En exploration of the determinants of school "success". *Oxford Review of Education*, 24, 439-457.
13. Krejcie, R.V., & Morgan, DW (1970). Détermination de la taille de l'échantillon des activités de recherche. *Éducatifs et psychologiques mesure*.
14. Krieger, J. D. (2003). *Class Size Reduction : Implementation and Solution*. ERIC Document Reproduction Service, no. ED47589.

15. Krueger, A.B., & Hanushek, E.A. (2000). The class size debate, Working Paper; 121, Washington, DC, Economic Policy Institute, ERIC Document Reproduction Service, no. ED452297.
16. Lafortune, L., & Doudin, P. A. (Dirs.) (2006). Intervenir auprès d'élèves ayant des Besoins particuliers : quelle formation à l'enseignement? Sainte-Foy, QC : Presses de l'Université du Québec.
17. Lupton, R. (2004). Schools in disadvantaged areas: recognising context and raising quality. Manuscript non-publié. Centre for Analysis of Social Exclusion.
18. Lee, V. E. (2000). Using hierarchical linear modeling to study social contexts: the case of schooleffects. *Educational psychologist*, 35(2), 125-141.
19. Meuret, D. (2001a). Les recherches sur la réduction de la taille des classes. Rapport établi à la demande du Haut conseil de l'évaluation de l'école. Paris : République française.
20. Meuret, D. (2001b). L'effet de la réduction de la taille des classes sur le progrès des élèves. Avis 1, mars, Rapport établi à la demande du Haut conseil de l'évaluation de l'école. Paris: République française.
21. Milesi, C., & Gamoran, A. (2006). Effects of Class Size and Instruction on Kindergarten Achievement. *Educational Evaluation and Policy Analysis*, 28(4), 287-313
22. Miller-Whitehead, M. (2003). Compilation of Class Size Findings: Grade, Level, School and District. ERIC Document Reproduction Service, no. ED 482693.
23. Mosteller, F. (1995).The Tennessee study of class size in the early school grades. *Critical Issues for Children and Youths*, 5(2), 113-127.
24. Normore, A. H., & Ilon, L. (2006). Cost-Effective School Inputs: Is Class Size Reduction the Best Educational Expenditure for Florida? *Educational Policy*, 20 N°2, p.429-454.
25. Nye, B., L., Hedges, V., & Konstantopoulos, S. (2000). The Effects of Small Classes on Academic Achievement: The Results of the Tennessee Class Size Experiment. *American Educational Research Journal*, 37(1), 123-151.
26. Opdenakker, M.C., & Van Damme, J. (2001). Relationship between school composition and characteristics of school process and their effect on mathematic achievement. *British Educational Research Journal*, 27, 407-432.
27. Paul, E. P., & Martin, R. W. (2003). No Child Left Behind? The Politics and Practice of School Accountability. Washington, DC: Brookings Institution Press.

28. Peevely, G., Hedges, L., & Nye, B. A. (2005). The Relationship of Class Size Effects and Teacher Salary. *Journal of Education Finance*, 31(1), 101-109.
29. Michaud, P. (1981). La mesure de la productivité dans le domaine de l'éducation : un examen des écrits. *Revue des sciences de l'éducation*, 7(3), 487-502. <http://id.erudit.org/iderudit/900347arDOI:10.7202/900347ar>.
30. Piketty, T. (2004). L'impact de la taille des classes et de la ségrégation sociale sur la réussite scolaire dans les écoles françaises : une estimation à partir du panel primaire 1997. Paris : Paris-Jourdan EHESS. Document de travail.
31. Pressley, M., Gaskins, I.W., Solic, K., & Collins, S. (2006). A Portrait of Benchmark School: How a School Produces High Achievement in Students who Previously Failed. *Journal of Educational Psychology*, 98(2), 282-306.
32. Psacharopoulos, G., & Woodhall, M. (1988). L'éducation pour le développement. Une analyse des choix d'investissement. Paris: Economica.
33. Reynolds, D., Teddlie, C., Creemers, B., Scheerens, J., & Townsend, T. (2000). An introduction to effectiveness research. In C. Teddlie, & D. Reynolds (Dir.): *The international handbook of school effectiveness research*. New York, New York: Falmer Press.
34. Roellke, C. (2003). Resource Allocation in Rural and Small Schools. ERIC Documentation Reproduction Service, no. ED482323.
35. Rowe, K. (2003). The importance of teacher quality as a key determinant of students' experiences and outcomes of schooling. Paper presented at the annual conference of the Australian Council for Educational Research, Melbourne, Australia.
36. Rutter, M., & Maughan, B. (2002). School effectiveness findings 1979-2002. *Journal of school psychology*, 40(6), 451-475.
37. Sall, H. N., & De Ketele, J-M. (1997). L'évaluation des rendements des systèmes éducatifs : apports des concepts d'efficacité, d'efficience et d'équité. *Mesure et Évaluation*. 19(3), 119-142.
38. Sanogo, Y., & Gilman, D. (1994). Class size and student achievement: Tennessee's STAR and Indiana's Prime Time projects. ERIC Document Reproduction Services, ED370680.
39. Shapson, S., Wright, E., Eason, G., & Fitzgerald, J. (1980). An experimental study of the effects of class size. *American Educational Research Journal*, 17(2), 141-152.
40. Sharp, M.A. (2003). Summary of an Analysis of Pupil-Teacher Ratio and Class Size Differences that Make a Difference and its Implications

- on Staffing for Class Size Reduction. ERIC Documentation
Reproduction Service, no. ED476106.
41. Slavin, R. E. (1989). Class size and student achievement: Is smaller better? *Contemporary Education*, 62(1), 6-12.
 42. Teddlie, C., & Reynolds, D. (2000). *The international handbook of school effectiveness research*. New York, New York: Falmer Press.
 43. Thrupp, M. (1999). *Schools making a difference. Let's be realistic*. Buckingham, Philadelphia: Open University Press.
 44. Van Zanten, A. (2001). *L'école de la périphérie. Scolarité et ségrégation en banlieue*. Paris : Presses Universitaires de France.
 45. Verloop, N. (1988). Examen des connaissances d'enseignant. *Journal of Curriculum Studies*, 20, 81-86.
 46. Vezeau, C., Chouinard, R., Bouffard, T., Janosz, M., Bergeron, J., & Christiane Bouthillier(2010). Estimation de l'effet-école et de l'effet-classe sur la motivation des élèves du secondaire. *Revue des sciences de l'éducation*, 36(2), 445-468. URI: <http://id.erudit.org/iderudit/044485ar> DOI : 10.7202/044485ar.
 47. Word, E., Achilles, C. M., Bain, H., Folger, J., Johnston, J., & Lintz, N. (1990). Project STAR final executive summary: Kindergarten through third grade results (1985-89). *Contemporary Education*, 62(1), 13-16, NCDS.



The Impact Of Human Capital On Nigeria's Economic Growth

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Abstract

Despite abundant evidence at microeconomic level, the role of human capital in promoting economic growth and development has not been well documented at the macroeconomic level – specifically in developing countries. This paper seeks to examine the role of human capital on economic growth in Nigeria using time series data covering the period from 1970-2019. The data are sourced from Central Bank of Nigeria (CBN) statistical bulletin and World Development Indicators of the World Bank. The data are analyzed using Autoregressive Distributed Lag model (ARDL). The study reveals that expenditure on health and education are found to be positively and significantly related with economic growth both in the short-run and long-run. However, labor negatively impact on economic growth and it was found to be significant. Again, trade openness and inflation are insignificant in explaining economic growth in this paper. Thus, the paper recommends that, Nigerian government should focus on improving the educational and health sector. Meaning that, huge amount of government budgetary allocation should be directed toward educational and health sector. So also, government should create more jobs opportunities (through skills acquisitions/ vocational training) to minimize the unemployment rate in the country.

Keywords: Human Capital, Labour, Health, Education, Economic Growth

Introduction

The role of human capital in the growth process of any nation is very crucial. Every business organizations use three types of capital: physical capital (factory, stocks etc.), financial capital (investments), and intellectual capital (Obeidat 2016; Romele, 2013). Human capital is also seen as a component of intellectual capital. It represents the investments made on humans and encompasses human-related factors like knowledge, skills, experience, sufficiency, business quality, employee relations, emotional intelligence, entrepreneurialism, flexibility, employee loyalty, employee satisfaction, education, and creativity (Adelakun, 2011). Although investment on humans in many businesses is the most difficult investment to control; the role of human capital is still important in examining the growth rate of a country.

In any economic system be it market economy or centrally planned, the major objective is how to increase per capita output and this can be achieved through increase in level of productivity. Per capita output growth is a component of economic welfare. It is revealed from experience that human capital is the most important and promising source of growth in productivity and economic growth besides labor and physical capital. Equipment and technology are products of human minds and can only be made productive by people. The success of any productive program depends on human innovative ideas and creativity (Abramowitz, 1981; Pangeran, 2015; Skapska & Samul, 2015).

Organization for Economic Co-operation and Development (OECD, 1996), stated that as the global economy shifts towards more knowledge-based sectors (e.g. the manufacture of ICT devices, pharmaceuticals, telecommunications and other ICT-based services, R&D), skills and human capital development becomes a central issue for policy makers and practitioners engage in economic development both at the national and regional level (OECD,1996). Nonetheless, the impact education and vocational training activities exert upon changing national and regional economies remain less than thoroughly explained and analyzed.

Adelakun (2011) posits that the central focus of every country today (developed or developing) has been finding ways to increase the growth rate of national income and to engage in structural transformation. That is moving away from subsistence and resource-based economy to a production and consumption-based economy in order to break the vicious circle of poverty, low productivity and stagnation. Furthermore, Nigeria is blessed with both natural and human resources. Despite these endowments, the rate of illiteracy is very high in the country as most of the workers are unskilled and they make use of outmoded capital, equipment and methods of production. This by implication reduces their marginal productivity and subsequently leads to low

real income, low savings, low investment and low rate of capital formation (Jibir & Abdu, 2017; Bashir, *et al.*, 2014; Odhiambo, Wambugu & N'anga, 2015).

Meanwhile, the global economy is today divided into two parts comprising of a few rich nations referred to as the developed countries (DCs) and many poor nations called as the less developed countries (LDCs). DCs are characterized by high productivity while the LDCs are characterized by low productivity. According to the level of human capital development and per capita income, Nigeria is classified under the LDCs.

Still ahead, Romer (1990) posits that human capital is a source of economic efficiency. Given that human capital is generally accepted of productivity, human capital could be taken to mean all sorts of knowledge, skills and experiences that improve production capacity, and subsequently results in huge economic growth and development. Organization for Economic Co-operation and Development (OECD), (1996) defines human capital as the contributions of knowledge and skills made by an individual to a country's economy, and thus as the improvement in social and economic development made by an individual.

To sum it up, human capital can be defined as any contributions made by the individuals through their knowledge, skills and experience gained which would lead to the good economic performance of a country. Besides labor and capital, human capital has a significant place in endogenous growth models. Thus, the results of this paper are essential to the Nigerian government to design and implement policies that would enhance human capital development. The remaining parts of the paper are as follows: The review of the literature is presented in section 2. The methodology of the paper is covered in section 3. Data analysis and presentation are reported in Section 4. Finally, the paper is concluded in section 5.

Literature Review

There are different growth theories in economics that explain economic growth. Among others, these include classical, neo-classical and endogenous growth theories. Considering the basis of economic growth models, it was observed that Smith and Ricardo were the pioneers of classical growth theories. They investigated the growth processes of countries and provided significant contributions to the relevant literature. According to classical theory of economic growth, labor productivity is considered as an exogenous factor which largely depends on the ratio between workforce and physical capital, plus other factors (technical progress), but the important effect of human capital on potential growth of productivity had not been taken into cognizance. As such, new theory of economic growth was developed in the early 1980s to correct the weaknesses of the classical theory by

emphasizing the importance of education and innovation, (some elements of human capital) in long-term economic growth processes (Jibir & Abdu, 2016; Pelinescu, 2015).

Neo-classical theorists accepted technology and human capital as exogenous factors which determine long run economic growth (Jibir *et al*, 2018; Kar & Ađır, 2006). The endogenous growth models emphasize human capital as a major determinant of long-run economic growth. Romer (1986), was the first to include human capital in the economic growth models. He further, indigenized technology and included human capital into the model, which is contrary to the Neo-classical growth model. In addition, Lucas (1988) adds human capital into the model as the qualification levels of individuals (Ulucak, 2015). Thus, endogenous growth models instead focus on the quality of the population and accept the primary determinants of economic growth as either a direct increase in human capital or indirect activities of human capital like R&D activities.

The endogenous growth models emphasize human capital as a major determinant of long-run economic development (Romer, 1989; Lucas, 1988). Empirical studies have been carried out by many researchers to examine the nexus between human capital and economic growth in the economic literature. For example, Siddiqui and Rehman (2017) conducted a study to test the between human capital and economic growth in selected nine Asian countries. Their study found that primary and secondary education are more prominent in explaining the fluctuations of economic growth in East Asia, whereas tertiary and vocational training showed positive effects on economic growth in South Asia. The study reveals that government expenditure on education was found to be positively affecting economic growth in both the regions.

Oluwatobi and Ogonrinola (2011) and Jibir and Babayo (2015) investigate the impact of government recurrent and capital expenditure on education and health in Nigeria and their effect on economic growth using secondary source of data. The results show that there is a positive relationship between government recurrent expenditure on human capital development and real output in Nigeria. Ogundari and Awokuse (2018) conduct a study on the impact of human capital on economic growth in Sub-Saharan Africa covering 35 countries from 1980-2008. The study indicates that both expenditure on health and education have a positive effects on economic growth. The contributions of health on economic growth are relatively larger than the impact of education on economic growth. Afridi, Augrah, and Bary (2016) in their study in Pakistan found that human capital is the main driver of economic growth. Ejoro (2020) investigates the causal relationships between government spending on education and economic growth in eight selected Latin American countries. The findings found a positive and significant

relationship between expenditure on education and economic growth both in the long-run and short-run.

Adelakun (2011) examines the effects of human capital development and economic growth in Nigeria. The study employs the theoretical and Ordinary Least Square method (OLS). The analysis confirms that, there is a strong positive relationship between human capital and economic growth. Muddassar (2019), in his study, investigates the nexus between Human capital and economic growth using a Dynamic Panel Data (DPD) and Generalised Method of Moments (GMM) and provides inferences that human capital positively affects economic growth.

Matousek and Tzeremes (2019) re-examine the effects of human capital on countries economic growth using a sample of 100 countries over the period from 1970 to 2014. The empirical findings suggest that the effects of human capital on countries economic growth levels is positively and significant. Parika and Singh (2020) conduct a study to examine the relationship between human capital and economic growth in India. The study utilizes annual time series data for the period 1980-2017. The major findings of the study suggest that human and physical capital is the major determinants of economic growth.

Jaiyeoba (2015) conducts a study to investigate the nexus between investment in education, health and economic growth in Nigeria using time series data covering the period 1982-2011. Empirical findings reveal that there is a long-run positive relationship between government expenditure on education, health and economic growth in Nigeria. Kanayo (2013) in Nigeria empirically examines the relationship between human capital development and economic growth using time series data. The findings show that investment in human capital in the form of education and capacity building at the primary and secondary levels impact significantly on economic growth. Therefore, it can be clearly observed in the empirical literature above that different studies have been carried out in economics to investigate the relationship between human capital and economic growth within and outside Nigeria. This is because human capital has a significant role in determining economic growth especially in developing countries like Nigeria. In the light of the above, this paper attempts to examine the role of human capital on economic growth in Nigeria in order to add knowledge to the existing literature. The paper focused on the long-run and short-run effects of human capital on economic growth using ARDL model for the period 1970-2019.

Methodology

Data Sources

In this paper, time series data is used covering the period from 1970 to 2019 and the data was sourced from CBN Statistical Bulletin and World

Development Indicators of the World Bank. Based on the modern growth theory or endogenous economic growth theory, real gross domestic product (RGDP) is the proxy of economic growth and it is the dependent variable whereas the independent variables are human capital (HC), labor (LB), trade openness (TO), and inflation (INFL). However, expenditure on health and education are used as the proxy of human capital. Labor force is used as the proxy of labor, trade openness is proxied by export plus import as a share of gross domestic product, and inflation is measured by consumer price index.

Model Specification

Human capital through education and training helps to improve the quality of workforce and improve their aggregate income. Some human capital is related to knowledge and education. Thus, economic growth depends on technological progress and scientific discoveries. It is therefore reasonable to consider economic growth to be a function of human capital. In line with the objective of this paper, the association between human capital and economic growth as done by many studies (Muhammad, Nurdin, Sunusi, & Che 2012), can be measured by Cobb-Douglas production function. Therefore, the aggregate production function can be stated as follows:

$$Y = AK^\alpha L^\beta H^c \dots \dots \dots (1)$$

Where Y is the output, “A” represents technical progress, “K” is the physical capital, “L” is the labour force and “H” denotes human capital which can be replaced by E^Δ and E^* as government expenditure on education and health respectively. Thus, equation (1) can be re-write as follows:

$$Y = AK^\alpha L^\beta E^\Delta E^* \dots \dots \dots (2)$$

However, equation (2) can further be written in form of econometrics to include other variables and stochastic term. It is stated below:

$$RGDP = EE^\Delta + EH^* + LB + TO + \varepsilon \dots \dots \dots (3)$$

Where:

- RGDP = Real gross domestic product
- EE^Δ = Expenditure on education
- EH^* = Expenditure on health
- LB = Labor
- TO = Trade openness
- IF = Inflation
- ε = Error term

Tools of Analysis

Time series research requires stationarity test in order to know the order of integration of the variables included in the model. This helps in avoiding the problem of unit root and also helps in determining the best model to be applied. In view of this, the empirical analysis of this paper consists of

three major steps. The first step involves the stationarity test, the second step is co-integration test and the third step is the diagnostic tests.

Stationarity Test

The first step is the stationary test which is very important in any time series research. The stationarity test can be conducted using Augmented Dickey Fuller (ADF) test developed by Dickey and Fuller (1988) and Philips-Perron test developed by Philips and Perron (1979).

Co-integration Test

The second step is the autoregressive distributed lag (ARDL) bounds testing approach to co-integration recently developed by Pesaran and Shin (1995). The used of this technique has numerous advantages over other techniques of estimation like Engle and Granger (1987) and Johansen (1991). One of the major advantage of this technique is that it can be applied in respective of the order of co-integration of the independent variables (either I(1) or I(0) or both). More so, ARDL model is statistically a significant tool of econometric analysis and has advantageous over other techniques of analysis because it can accommodate small sample size.

The best model that suits this paper is the autoregressive distributed lag (ARDL) bounds testing approach to co-integration recently developed by Pesaran and Shin (1995). This is because the stationarity test has two combinations (I(1) and I(0)). In line with the above, the ARDL approach can be specified as real gross domestic product (RGDP) as a function of lagged value of itself and the current lagged values of the explanatory variables included in the model. In this paper, the first step in ARDL approach is the estimation of conditional ARDL for model one as presented in equation (4):

$$\begin{aligned} \Delta \ln \text{RGDP} = & \beta_0 + \beta_1 \ln \text{RGDP}_{t-1} + \beta_2 \ln \text{EH}_{t-1} + \beta_3 \ln \text{EE}_{t-1} + \beta_4 \ln \text{LB}_{t-1} + \beta_5 \text{TO}_{t-1} \\ & + \beta_6 \text{INFL}_{t-1} + \sum_{i=t}^n \theta_1 \Delta \ln \text{RGDP}_{t-1} + \sum_{t=1}^n \theta_2 \Delta \ln \text{EH}_{t-1} \\ & + \sum_{t=1}^n \theta_3 \Delta \ln \text{EE}_{t-1} + \sum_{t=1}^n \theta_4 \ln \text{LB}_{t-1} + \sum_{t=1}^n \theta_5 \text{TO}_{t-1} \\ & + \sum_{t=1}^n \theta_6 \text{INFL}_{t-1} + \mu \dots \dots \dots (4) \end{aligned}$$

where β_0 is the constant, μ is the stochastic error term, Δ is the first different operator, the parameters β_0 – β_6 denote the long-run parameters, while θ_1 – θ_6 represents short-run parameters of the model to be estimated through the error correction framework of ARDL. $\ln \text{RGDP}$ is the natural log of real gross domestic product, $\ln \text{EH}$ is the natural log of expenditure on education, $\ln \text{EE}$ is the natural log of expenditure on education, $\ln \text{LB}$ is the natural log of

labor, TO is the trade openness, INFL represents inflation, n is the optimal lag length and β_1-6 are the coefficients to be estimated in the model.

However, having stated the conditional ARDL model in equation (4) above, the next step is to apply equation (4) in order to test the hypothesis of the paper which states that there is no co-integrating relationship among the variables against the alternative hypothesis that there is long-run relationship between the variables. This is specified as:

$$H_0 = \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$$

$$H_1 = \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0$$

In addition, the condition for accepting or rejecting the hypothesis states that, the calculated F-statistics is compared with two sets of critical values developed on the ground that the explanatory variables are I(d) (where $0 \leq d \leq 1$). The lower critical values assume that all the variables are I(0) while the upper assumed that they are I(1). The criterion for the F-statistic is, if the calculated F-statistic is greater than upper critical value, then null hypothesis of no long-run relationship is rejected. On the other hand, if the F-statistic is less than lower bound, then the null hypothesis of no co-integration should be accepted. Furthermore, if F-statistic lies within the lower and upper critical bounds, then the result is inconclusive (Pesaran & Smith, 1997). To obtain the long-run coefficients, equation (5) is specified as:

$$\begin{aligned}
 \ln RGDP = & \beta_0 + \sum_{i=0}^p \beta_1 \ln RGDP_{t-1} + \sum_{i=0}^{p1} \beta_2 \ln EH_{t-1} + \sum_{i=0}^{p2} \beta_3 \ln EE_{t-1} \\
 & + \sum_{i=0}^{p3} \beta_4 \ln LB_{t-1} + \sum_{i=0}^{p4} \beta_5 TO_{t-1} + \sum_{i=0}^{p5} \beta_6 \ln INFL_{t-1} \\
 & + \mu_t \dots \dots \dots \dots \dots \dots \dots \dots (5)
 \end{aligned}$$

Examining the long-run and short-run effects of human capital on economic growth is the core objective of this paper. As such the short-run ARDL model is specified in equation (6) below:

$$\begin{aligned}
 \Delta \ln RGDP = & \beta_0 + \sum_{i=1}^p \beta_1 \Delta \ln RGDP_{t-1} + \sum_{i=1}^p \beta_2 \Delta \ln EH_{t-1} + \sum_{i=1}^p \beta_3 \Delta \ln EE_{t-1} \\
 & + \sum_{i=1}^p \beta_4 \Delta \ln LB_{t-1} + \sum_{i=1}^p \beta_5 \Delta TO_{t-1} + \sum_{i=1}^p \beta_6 \Delta \ln INFL_{t-1} \\
 & + \mu_t \dots \dots \dots \dots \dots \dots \dots \dots (6)
 \end{aligned}$$

Looking at the short-run ARDL model, $\beta_1-\beta_6$ remains unchanged in the model, while Δ represents coefficients of short-run dynamic to be estimated.

Results and Discussion

In this paper, three variables namely: real gross domestic product (RGDP), expenditure on education (EE), trade openness (TO) were found to be I(1) while the remaining variables such as: expenditure on health (HE), labour (LB), and inflation (INFL) are found to be I(0). The combinations of I(1) and I(0) lead to the adoption of ARDL.

Unit Root Tests

The unit root test is conducted using ADF and PP tests. The result of the ADF and PP unit root test is presented in table 1. The test is done both with the intercept and trend and intercept at level and first difference. It can be observed from the table 1; at level with intercept inflation (INFL) was stationary. Variables such as, expenditure on health (EH) and labor (LB) are stationary at level both with trend and intercept. While, real gross domestic product (RGDP), expenditure on education (EE), and trade openness (TO) are found to be stationary at first difference with trend and intercept and intercept.

Table 1. ADF Unit Root Test

Variables	At Level		At First Difference		
	Intercept	Trend & Intercept	Intercept	Trend & Intercept	Order of Integration
RGDP	-0.920	-2.004	-7.684***	-7.617***	I(1)
lnEH	-0.447	-4.777***	-	-	I(0)
EE	-1.827	-2.077	-9.558***	-9.452***	I(1)
lnLB	-1.487	-6.029***	-	-	I(0)
TO	-2.839	-2.782	-7.885***	-7.815**	I(1)
INFL	-3.442***	-4.032*	-	-	I(0)

Source: Computed by Author using E-view 10.0.

(a) RGDP, lnEH, EE, lnLB, TO, INFL stand for real gross domestic product, log expenditure on health, expenditure on education, log labor, trade openness, and inflation. (b) ***, **, and * denote significance at 1%, 5%, and 10% respectively. I (0) stand s for order of integration at order zero while I(1) stand for order of integration of order one. When PP test is conducted, the result is consistent with the ADF result. Like in the case of ADF, expenditure on health, labor, and inflation are found to be stationary at levels while the remaining variables become stationary after taking their first difference at both constant with trend and intercept. But in PP test result expenditure on health, labor, trade openness, and inflation are found to be stationary at levels while the remaining variables are found to be stationary after taking their first difference as reported in table 2.

Table 2. Philips-Perron Stationary Test

Variables	At Level		At First Difference		
	Intercept	Trend & Intercept	Intercept	Trend & Intercept	Order of Integration
RGDP	-1.334	-2.301	-7.772***	-7.848***	I(1)
lnEH	-0.303	-4.751***	-	-	I(0)
EE	-1.469	-2.574	-9.512***	-9.414***	I(1)
lnLB	-2.081	-6.045***	-	-	I(0)
TO	-2.934**	-2.894	-	-	I(0)
INFL	-3.274**	-3.268	-14.569	-15.346	I(0)

Source: Computed by Author using E-view 10.0.(a) RGDP, lnEH, EE, lnLB, TO, INFL remained as defined in table 1 above. (b) ***, **, and * denote significance at 1%, 5%, and 10% respectively. I (0) stand s for order of integration at order zero while I(1) stand for order of integration of order one.

It is clearly observed from table 2 above, the PP results reveal that variables such as inflation, labor, trade openness and expenditure on health are in order zero I(0) while real gross domestic product and expenditure on education were in order one 1(1). Thus, the combination of I(1) and I(0) provides a basis for adopting ARDL approach to co-integration because it can be applied irrespective of order of integration whether (I(1), I(0) or both) as clearly explained in the methodology section.

Bound Test for Co-integration

The bound test approach helps in testing the null hypothesis that the coefficient of the lagged levels is zero. However, the F-statistics tests the null hypothesis of no long-run co-integration relationship between the variables. Since the study deploys the time series data it's paramount to decide the optimal lag length of the model. The study determines the optimal lag length of the model by identifying the longest lag and testing until the lags that are significant are found.

Table 3 depicts the results of the computed F-statistics for the model when the real gross domestic product is normalized as the dependent variable – F_{rgdp} (RGDP ,lnEH, EE, lnLB, TO, and INFL) is equal to 5.301 which is higher than the upper critical value at 1%, 5% and 10% levels of significance. This shows that there is long-run relationship between the variables in the model.

Table 3. Result of bound test for co-integration

Significant level	Critical values	
	Lower bound	Upper bound
1% significance level	3.420	3.350
5% significance level	2.620	3.790
10% significance level	2.260	4.680
F-statistics	5.301	K=5

Source: Computed by Authors using E-view 10.0

The lag length of each variable is selected using AIC criterion. Critical values are generated under the model with unrestricted intercept and trend. * shows computed statistics falls above the upper and lower bound values at 1%, 5%, and 10% level of significance respectively.

Short and Long Run Relationship

Since the growth model is found co-integrated, the long run and short-run parameters of the ARDL model are estimated and the results are presented in Table 4.

Table 4. Estimated long-run and short-run coefficient using ARDL approach

Long-run Model {1,1,1,2,0,2}			Short-run Model {1,1,1,2,0,2}		
Dependent variable: InRGDP			Dependent variable: InRGDP		
Regressor	Co-efficient	P.value	Regressor	Co-efficient	P.value
InEH	0.125**	0.035	Δ InEH	0.001	0.980
InEE	0.446***	0.000	Δ InEE	0.082*	0.057
LnLB	-1.280**	0.047	Δ LnLB	-0.025	0.846
TOP	0.003	0.180	Δ TOP	0.002	0.591
INFL	-0.003	0.297	Δ INFL	0.001	0.471
C	12.566**	0.008	ECM(-1)	-0.396***	0.001

Notes: (a) InEH, InEE, InLB, InRGDP indicates log of expenditure on health, log of expenditure on education, log of labour and log of real gross domestic product while variables TOP, INFL, C and ECM denote trade openness, inflation, constant and error correction term respectively. (b). *, **, and *** is the level of significance at 10%, 5% and 1%. (c). However, the optimal lag length is determined by Akaike Information Criterion.

Source: Authors' computation using E-views 10.0.

Table 4 above reports two models estimated both in the short-run and long-run. It can be seen in the table, the long-run and short-run estimated equations indicate that, expenditure on education is positively related with real gross domestic product both in the short-run and long-run but happened to be significant in the long-run at 5% level of significance. According to the coefficient value of InEH (i.e government expenditure on health), a 1% increase in government spending on health may likely lead to 0.13% increase in real gross domestic product in Nigeria. This result supports the endogenous growth model which argues that, the growth of an economy is largely dependent on the labor and human capital. In addition, Nigeria is one of the developing countries where there is prevalence of many diseases which may affect the lives of many people and thus limit their productivity which in turn may bring about decline in the growth of an economy. If government spends huge amount of money in the health sector as found in this paper, it is expected this would help to improve health status and increase their level of productivity.

The variable expenditure on education is found to be positive and significant with real gross domestic product in the long-run and short-run at 5% and 10% respectively. The coefficient of InEE (expenditure on education)

shows that 1% increase in government expenditure on education brings about 0.45% and 0.08% increase in the real gross domestic product in the long-run and short-run respectively. More so, expenditure on education is very important in an economy because it helps in research and innovations increased the number of skilled workers through learning and training etc. Studies have found that many advanced countries have their development through improvement in human capital (Muddasar, 2019; & Ulukak, 2015). This positives nexus between expenditure on health and real gross domestic product is in line with the modern growth model which believed that, human capital determined economic growth of the country.

The coefficient of labor is found to be significant only in the long-run but the sign of the relationship is negative both in the long run and short run with real gross domestic product. This negative relationship implies that a 1% unit increase in labor reduces RGDP by 1.28% in the long-run. This negative impact of labor on RGDP may be connected with the massive rate of unemployment in Nigeria. The empirical result of the relationship between labor and real gross domestic product is against the theoretical justification of the endogenous theory who believed that, the growth of an economy in the long-run is determined by the human capital and labour.

Although, the relationship between trade openness and real gross domestic product are found to be positive which have met a prior expectations but was insignificant both in the short-run and long-run. So also, inflation is the model estimated is found insignificant but negatively affect real gross domestic product in the long-run but positively related in the short-run. The ECM(-1) values simply shows the speed of adjustment whenever there is disequilibrium in the model. Based on the result obtained above, the speed at which disequilibrium will restore back to equilibrium is by 39%.

Diagnostic Analysis of Data

In time series research, the reliability and acceptability of the results after model has been estimated is the ability of the model to pass all the necessary diagnostic tests especially those that may lead to spurious results. The study conducted robust diagnostic tests for autocorrelation, heteroscedasticity, normality, stability and specification tests which are presented in table 4.

Table 5. Model Diagnostic Tests

Diagnosics test techniques	Statistics	Probabilities
Breusch-Godfrey Serial correlation LM test	0.369	0.694
Heteroscedasticity test	1.711	0.107
Normally test	0.675	0.564
Ramsey RESET test	1.044	0.314

Source: Computed by author using E-views 10.0.

Table 5 depicts diagnostics tests conducted for the growth model. One of the vital assumptions of ARDL bounds test is that the error term should not have autocorrelation. In this paper, Breusch-Godfrey LM serial correlation test is conducted and the result indicates that null hypothesis cannot be rejected as the F-statistic for test is found to be 0.369 with probability value of 0.694 indicating that there is absence of serial correlation in the model.

Furthermore, the diagnostic tests also reveal that the model is normally distributed. In the same vein, the model passes the tests for heteroscedasticity and linearity. The study also tested for model misspecification using Ramsey RESET test and the result reveals that the null hypothesis cannot be rejected indicating that the growth model is correctly specified.

Conclusions and Policy Recommendations

The relationship between human capital and economic growth has been carried out in the field of economics by many researchers yielding different outcomes. This paper attempts to examine the effects of human capital on economic growth using expenditure on education and health as the proxies of human capital. The results show that, three variables namely: expenditure on health and expenditure on education are found to be positively and significantly associated with real domestic product. While labor is found to be significant but negatively impacts on real gross domestic product. The remaining independent variables; inflation and trade openness were insignificant in determining the level of economic growth in Nigeria both in the short-run and long-run. Thus, the paper recommends that, Nigerian government should focus on improving the educational and health sector. Meaning that, huge amount of government budgetary allocation should be directed toward educational and health sectors. So also, government should create more jobs opportunities (through skills acquisitions/ vocational training) to minimize the unemployment rate in the country. This helps to increase per capita income and increase spending by the populace. The findings of this paper is in line with the studies done by; Adelokun, (2011), Oluwatubi and Ogonrinola (2011), Jibir and Abdu (2020), Kanayo, (2013), Ajaiyeobi, (2015), Ogundari and Awokuse (2018), Affandi, (2019) and Parika and Singh (2020).

References:

1. Abramowitz M. (1981): Welfare quandaries and productivity concerns. *The American Economic Review*, 7, 1-17.
2. Adamu, J., & Hajara, A. I. B. (2015). FDI and Economic Growth Nexus: Empirical Evidence from Nigeria (1970-2012). *Journal of Economics and Sustainable Development*, 8(1), 43-56.

3. Adelokun, O. J. (2011). Human capital development and economic growth in Nigeria. *European Journal of Business and Management*, 3(9), 29-38.
4. Afridi, A. H. (2016). Human capital and economic growth of Pakistan. *Business & Economic Review*, 8(1), 77-86.
5. Bashir, T., Mansha, A., Zulfiqar, R., & Riaz, R. (2014). Impact of FDI on economy growth: a comparison of South Asian States & China. *European Scientific Journal*, 10(1).
6. Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American statistical association*, 74(366a), 427-431.
7. Engle, R. and Granger, W. J. (1987), "Co-integration and Error Correction: Representations, Estimations and Testing", *Econometrics*, 55(2), 251-276.
8. Jaiyeoba, S.V. (2015), Human capital investment and economic growth in Nigeria. *African Journal Online (AJOL)*, 9(1).
9. Jibir, A., & Abdu, M. (2017). Foreign Direct Investment-Growth Nexus: The Case of Nigeria. *European Scientific Journal*, 13(1), 23-55.
10. Jibir, A., & Musa, A. (2016). Causal links between foreign capital inflows and economic growth: Empirical evidence from Nigeria. *International Journal of Accounting & Business Finance*, 2(1), 45-56.
11. Jibir, A., Abdu, M. (2020). Human Capital and Propensity to Protect Intellectual Properties as Innovation Output: the Case of Nigerian Manufacturing and Service Firms. *J Knowl Econ*.
<https://doi.org/10.1007/s13132-020-00657-x>
12. Jibir, A., Abdullahi, S., Abdu, M., Buba, A., & Ibrahim, B. (2018). External debt-growth nexus in Nigeria revisited. *Asian Economic and Financial Review*, 8(1), 117-130.
13. Jibir, A., Bappayaya, B., & Babayo, H. (2015). Re-examination of the impact of unemployment on economic growth of Nigeria: An econometric approach. *Journal of Economics and Sustainable Development*, 6(8), 116-123.
14. Kanayo, O. (2013). The impact of human capital formation on economic growth in Nigeria. *Journal of Economics*, 4(2), 121-132.
15. Kar, A & Agir, P (2015) Investment in human capital. *The American Economic Review*, 51(1), 1-16.
16. Kazmi, S. M., Ali, K., & Ali, G. (2017). Impact of human capital on economic growth: Evidence from Pakistan.
17. Lucas S.R. (1988); 'The mechanics of economic development' *journal of monetary economics*.pp30-42.

18. Lucas, R. (1988). On the mechanics of economic development. *Journal of monetary Economics*. 3,23-45.
19. Matousek, R., & Tzeremes, N. G. (2019). The asymmetric impact of human capital on economic growth. *Empirical Economics*, 1-26.
20. Mohammad J., & nurdin, M, che, Y. (2012). The role of human capital in economic development evidence from aggregate cross-country data. *Journal of Monetary Economics*, 34, 143- 173.
21. Mudassar, K. (2019). Human capital and economic growth nexus: Does corruption matter?. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 13(2), 409-418.
22. Obeidat, Z. M. (2016). Human Capital Investment And Training In Islamic Banking Industry In Jordan. *Jordan Islamic Bank for Finance and Investment. European Scientific Journal*, 12(10).
23. Odhiambo, S. A., Wambugu, A., & Ng'ang'a, T. K. (2015). Has Quality of Governance Affected the Effectiveness of Health Expenditure on Adult Health in Sub-Saharan Africa?.
24. OECD – Organisation for Economic Cooperation and Development. *The knowledge-based economy*. Paris: OECD, 1996.
25. Ogundari, K., & Awokuse, T. (2018). Human capital contribution to economic growth in Sub-Saharan Africa: does health status matter more than education?. *Economic Analysis and Policy*, 58, 131-140.
26. Oluwatobi, S. A., & Ogunrinola, I. O. (2011). Government expenditure on human capital development: Implications for economic growth in Nigeria. *Journal of sustainable development*, 4(3).
27. Pangeran, P. (2015). Entrepreneurs' social and human capital on their knowledge of finance alternatives:evidence from Indonesia. *European Scientific Journal*, 11(10).
28. Parika, A., & Singh, B. P. (2020). How Does Human Capital Affect Economic Growth in India? An Empirical Analysis.
29. Pelinescu, E. (2015). The impact of human capital on economic growth. *Procedia Economics and Finance*, 22(1), 184-190.
30. Pesaran, M.H. and Shin, Y. (1995), *Long Run Structural Modelling*, No. 9419, Faculty of Economics, University of Cambridge: UK.
31. Pesaran, M.H. and Smith, R. (1997), “Estimating Long-Run Relationships From Dynamic Heterogenous Panels, *Journal of Econometrics*, 68(1), 79-113.
32. Romele, L. (2013). Human capital development and economic growth in Latvia. *European Scientific Journal*, 9(31).
33. Romer, P, (1990). Human capital and growth: theory and evidence, *Carnegie Rochester Conference Series on Public Policy* 32, 251-286;
34. Romer, P. M. (1990). Endogenous Technological Change.*journal of political economy*, 8(5)

35. Siddiqui, A., & Rehman, A. U. (2017). The human capital and economic growth nexus: in East and South Asia. *Applied Economics*, 49(28), 2697-2710.
36. Skapska, E., & Samul, J. (2015). Human capital indicators in service industries: from workforce profile to output measures. *European Scientific Journal*, 11(10).
37. Ulucak, R. (2015). The environment in economic growth models: An application based on ecological footprint (Unpublished doctoral thesis, Erciyes University, Social Sciences Institute) (in Turkish).



Challenges To Sustainable Supply Chain Management And Their Interrelation In The Apparel Sector Of Bangladesh: A Dematel Approach

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Abstract

The apparel industry is the prime driving force of the Bangladesh economy, contributing 83% to the total export earning with 27.94 billion USD in 2019-2020. The apparel industry has to deal with an intricate supply chain globally. While many apparel-exporting countries adopt sustainable supply chains, Bangladesh is still under the traditional supply chain umbrella. Sustainable supply chain in the apparel sector of Bangladesh is in the nascent stage yet. This study explores the challenges to the sustainable supply chain and their interrelation in the apparel sector of Bangladesh. This study incorporates thirty barriers in five categories (environmental, economic, societal, knowledge & technology, and Management & Stakeholders). This study is quantitative in nature, and data collection was completed two-fold. Two questionnaires were designed to garner a response. The first questionnaire was used to collect responses from experts (academic, buying-house, and industry people) to determine the most prominent barriers and shortened number of obstacles from thirty to eighteen. The second questionnaire was designed to collect responses from hundred respondents as input in the comparison matrix of DEMATEL. Finally, DEMATEL based

method was applied to investigate the interrelation among the barriers. From the result of the study, according to prominence value, lack of stakeholder involvement, high costs of sustainability adoption, insignificant financial gains, lack of supply chain integration are the prime barriers to SSCM. Moreover, this study unravels the cause-effect relationship among the barriers, ten barriers fall in the cause group, and eight barriers fall in the effect group, and finally, proposed corrective action to address the cause barriers.

Keywords: DEMATEL, Sustainable Supply Chain Management, Interrelation Of Challenges, Bangladesh Apparel Sector

Introduction

Supply chain management is an integral part of businesses and is essential to company success and customer satisfaction. These practices help improve financial position, improve customer services, and reduce operating costs (Majumdar & Sinha, 2019). Lesser known is the role of sustainable supply chain management in business and society. SSCM integrates both social and environmental dimensions with economic considerations, and it is still one of the newer concepts to be applied in companies (Moktadir et al., 2018). Moreover, if the textile and apparel industry is focused explicitly on, it becomes apparent that the rising level of outsourcing from developing countries has also increased the importance of sustainability. As the consumer lifestyle and demands keep changing, it puts pressure on the existing supply chain formats to modify and merge sustainability concepts in the upgraded system (Taghikhah et al., 2019). Thus, many well-known retailer brands have shifted from regular supply chain practices to SSCM. Sustainable supply chain management also creates additional advantages during the applied approach because it considers social, environmental, and economic factors (Gardas et al., 2018). The RMG sector in Bangladesh has become the economy's backbone as the largest export earnings source (84% of the total export) and employment (4.5 million direct employment and 20 million indirect employment)(Bank, n.d.). However, at the current growth pace, the target is not possible to achieve.

Furthermore, the industry has witnessed the collapse of around 200 firms in recent times, which indicated the newly added factories are fully compliant and are here to stay (*Coronavirus: Bangladesh's Garment Industry Risks Collapse | Asia | An in-Depth Look at News from across the Continent | DW | 25.03.2020*, n.d.). Therefore, though the number of new industries every year decreases, the freshly launched industries' quality is far better, taking Bangladesh to the next level as a role model of green initiatives and sustainable practices. Industry transformation phase, will propel a significant shift from regular supply chain systems into a sustainable supply chain. Both the textile

and the apparel sector stand to gain vastly from this, as less information and more dependency on developing countries for resources was what prompted this shift globally in the first place.

In the apparel industry, traditional supply chain management needs to be upgraded into a sustainable one. In this regard, SSCM practices may help make the traditional supply chains more sustainable by considering the Triple Bottom Line (economic, social, and environmental) and considering knowledge and technology and management and stakeholder participation (Craig R. Carter & Easton, 2011). Implementing SSCM practices in the Bangladeshi apparel industry will be challenging due to the numerous barriers that currently exist. In this sense, this research raises some questions:

- a. What are the key barriers to implement SSCM practices in the apparel supply chain?
- b. What are the contextual (cause-effect) relationship among barriers
- c. How can managers interpret cause and effect relationships among selected barriers?

This study has set the below objectives:

- a. To identify the critical barriers to the adoption of SSCM practices in the T&A. industry of Bangladesh.
- b. To understand the cause and effect relationships between selected barriers.

Literature Review

The term 'supply chain management' started evolving in the 1980s (Harland, 1996). In just a few years, this has emerged as a phenomenon of exceptional interest due to its applications in a wide array of domains. Several studies have explored the concepts of SCM and its importance in a variety of fields. Seuring & Müller (2008) defined supply chain management as a set of tasks that ensure the flow of information, finance, and goods from suppliers to end-users. The supply chain ensures the flow of material, information, and capital through proper channels among firms considering all three sustainability wings. Lambert et al. (1998) defined SCM as integrating pivotal business activities from suppliers to the customer, which provide products, services, and information for the value addition to customer and stakeholders. Customer need satisfaction and effective logistics management drive the maximization of value creation among stakeholders and enterprise. Management of relationships among key stakeholders and enterprise functions is supply chain management (Walters & Lancaster, 2000). A typical supply chain framework evolved, integrating environmental and social issues and economic concerns with the advancement of sustainable operations management (Seuring & Müller, 2008). Supply chain management plays a pivotal role in today's business arena where sustainability has called for

industrialist and researchers' attention from different aspects (Islam et al., 2020). Regardless of business organizations' size or nature, sustainability has become an inseparable part of their business (Kaur et al., 2018). Sustainability is the term that describes the capability to perform business with a vision of maintaining the society, environment, and economy (Hassini et al., 2012). Slawinski & Bansal (2011) defined sustainability as creating flexible firms by aligning economic, social, and environmental systems without sacrificing long-term goals. Sustainability practices pose different challenges to decision-makers, supply chain managers, and policymakers in the organization's supply chain (Marshall et al., 2015). Sustainable or green management initiatives have been launched to curtail cost and improve efficiency, customer satisfaction, market share, and sales. The acknowledgment of environmental impact due to efficient supply chain management led to the development of Green Supply Chain Management. GSCM focuses on the environment and economic aspects but fails to communicate social concerns, leading to unveiling Sustainable Supply Chain Management (Bansal & Roth, 2000; Lintukangas et al., 2016).

Seuring & Müller (2008) reported SSCM as an alignment of sustainable development and supply chain management, combining social and environmental concepts. SSCM is the extension of traditional supply chain management, merging all three-dimension (social, economic, and ecological) sustainability (Ciliberti et al., 2008; Font et al., 2008). Sticking to the traditional supply chain led to the downgrade of organizational performance. Hence, a sustainable supply chain shift is emphasized (Sarkis, 2012; Tseng et al., 2019). The concepts of sustainable development depend on the Triple Bottom Line (TBL) dimensions (economic, environmental, and social). The sustainability progression in the supply chain has also seen a notable contribution from two pillars: a combination of sustainability: socio-economic, socio-environmental, and eco-environmental dimensions (Rajeev et al., 2017). Most of the articles between 2003-2018 shed light on all three dimensions of sustainability. Environmental and economic dimensions in combined or economic and social dimension jointly get focus in less article. Sustainability's social dimension solely received the most attention in the papers (Koberg & Longoni, 2019). Carter & Liane Easton (2011) and Svensson & Wagner (2015) have indicated social, economic, and environmental as three wings of SSCM. Building up parity between profit, planet, and people in the clothing industry, it is substantial to address three sustainability pillars (Jabbour & Santos, 2008; Khan et al., 2018; Pomponi et al., 2019). Implementation of social sustainability magnifies operational performance and organizations' financial success (Schönborn et al., 2019). Lack of environmental regulations is often regarded as critical challenges for SSCM adoption (Wittstruck & Teuteberg, 2012), whereas rigid and expensive

environmental policy may impede a company's environmental proactivity (EM & C., 1995). Businesses with a target to reach minimal prerequisites may turn down the capacity to develop new technologies and solutions to boost environmental performance (Sajjad et al., 2015). Investment in SSCM needs to be mirrored by economic restoration; otherwise, organizations become unwilling to participate in SSCM practices without benefits (Sajjad et al., 2015). The observation of an uncertain economy stem from integrating SSCM practices may falter the organization's venture (Giunipero et al., 2012). (Mont et al., 2014) suggested stakeholder involvement as crucial to SSCM initiatives, while (Lorek & Spangenberg, 2014) reported a sheer number of stakeholders, primarily from non-developed countries lacking knowledge about sustainability. Top management's commitment is critical to the initiation of SSCM, but disinterest from the top and mid-level management may shrink the organization's capability to facilitate SSCM initiatives (Wittstruck & Teuteberg, 2012).

Table 1. Key challenges to SSCM

Author	Challenges	Method	Industry (Country)
(Q. Zhu et al., 2005)	Absence of central government environmental regulations, Lack of buying firms environmental mission,	Regression analysis	Manufacturing (China)
(Walker et al., 2008)	High costs of sustainability adoption, fear of exposure of poor environmental performance, lack of information, inertia by project stakeholders, supplier's (manufacturer) reluctance to change, Disbelief about environmental benefits	Exploratory factor analysis	Manufacturing (The U.K.)
(Diabat & Govindan, 2011)	Reverse logistics, a collaboration between product designers and suppliers to reduce and eliminate product environmental impacts	ISM	Manufacturing (India)
(Luthra et al., 2011)	Lack of top management commitment, lack of information technology	ISM	Automobile (India)
(Kannan Govindan et al., 2014)	The Complexity of measuring/monitoring environmental practices of suppliers, Lack of corporate social responsibility	AHP	Manufacturing (India)
(Mathiyazhagan et al., 2013)	The problem in maintaining the environmental awareness of suppliers, lack of top management involvement, Complexity in measuring and monitoring the environmental practice of suppliers	ISM	Auto component (India)
(Qinghua Zhu & Geng, 2013)	Insignificant financial gains, lack of resource and capability	Exploratory factor analysis	Manufacturing (China)
(Jalalifar et al., 2013)	Lack of top management support, lack of information and data, lack of supply chain integration	DEMATEL	Manufacturing (Iran)
(Luthra et al., 2016)	Lack of government support and policies, lack of management support, lack of resource and expertise, lack of stakeholders involvement	AHP	Plastic manufacturing (India)

(Wang et al., 2016)	Lack of adequate training and progress monitoring, low customer awareness, lack of pressure for widespread adoption	DEMATEL	Food packaging (India)
(Gandhi et al., 2015)	Top management commitment, human technical expertise, adoption of new technology and processes	DEMATEL	Manufacturing (India)
(Xia et al., 2015)	Less profit in remanufacturing Lack of cooperation with research institutes	DEMATEL	Automotive (China)
(K. Govindan et al., 2015)	Customer pressure	Fuzzy AHP	Manufacturing (India)
(Rao & Holt, 2005)	Fear of failure	SEM	Southeast Asia
(Silvestre et al., 2018)	Strong perception of low economic returns	Theoretical Framework	Beef Industry Brazil
(Moktadir et al., 2018); Shibin et al., 2018)	Ineffective supplier selection strategies The inefficient performance measurement system Ineffective employee training for sustainability	DEMATEL	Leather Industry (Bangladesh)
(Majumdar & Sinha, 2019)(Koberg & Longoni, 2019)	Lack of effective interdepartmental communication Non-consideration of human factors	ISM	Southeast Asia Textile and Apparel Industry
(Kannan Govindan et al., 2014)	High cost for disposing of hazardous wastes Cost of environmentally friendly packaging Non-availability of financial assistants	ISM	Auto component (India)
(Prakash & Barua, 2015)	Demand for lower price	AHP-TOPSIS	
(Sarker et al., 2018)	Market competition and uncertainty	Delphi study approach	Leather Industry (Bangladesh)
(Hasan, 2016) (Shi et al., 2008)	Weak regulatory environment	AHP	SME China

A closer look at the literature reveals several gaps and shortcomings

- a. Although a few attempts have been made to address these issues, it is still limited to a subset of the dimension of sustainability in supply chain management.
- b. There are no previous literature reports that explored challenges to adopt SSCM in the T&A of Bangladesh.
- c. Previous research typically investigated the implementation of GSCM in various fields, taking into account environmental sustainability only.
- d. Finally, it is pivotal to identify challenges from a cause-effect relationship perspective.

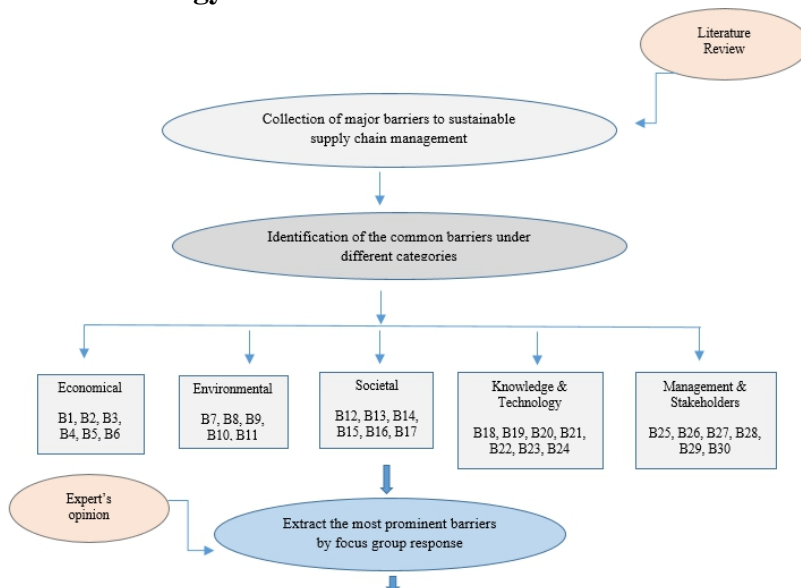
Methodology

Table 2. Category of key challenges in SSCM

SL No.	Challenges Type	Challenges Name	Code
B1	Economical	High costs of sustainability adoption	EC1
B2		Insignificant financial gains,	EC2
B3		Lack of resource and capability	EC3

B4		High cost for disposing of hazardous wastes	EC4
B5		Cost of environmentally friendly packaging	EC5
B6		Non-availability of financial assistants	EC6
B7	Environmental	Lack of Reverse logistics	EN1
B8		Market competition and uncertainty	EN2
B9		Complexity in measuring and monitoring the environmental practice of suppliers	EN3
B10		Weak environment regulatory	EN4
B11		Lack of buying firms environmental mission	EN5
B12	Societal	Absence of government support and policies	SC1
B13		Lack of corporate social responsibility	SC2
B14		Insufficient society pressure	SC3
B15		Poor customer awareness & demand	SC4
B16		Demand for a lower price	SC5
B17		Lack of employee motivation	SC6
B18	Knowledge & Technology	Disbelief about environmental benefits	KT1
B19		Lack of eco-literacy among supply chain stakeholders	KT2
B20		Ineffective supplier selection strategies	KT3
B21		The ineffective performance measurement system	KT4
B22		lack of information technology	KT5
B23		Lack of adoption of new technology and processes	KT6
B24		Lack of cooperation with research institutes	KT7
B25	Management & Stakeholders	Manufacturer's reluctance to change	MS1
B26		Lack of top management commitment	MS2
B27		Lack of stakeholders involvement	MS3
B28		Lack of supply chain integration	MS4
B29		Lack of effective interdepartmental communication	MS5
B30		Non-consideration of human factors	MS6

Research methodology flowchart



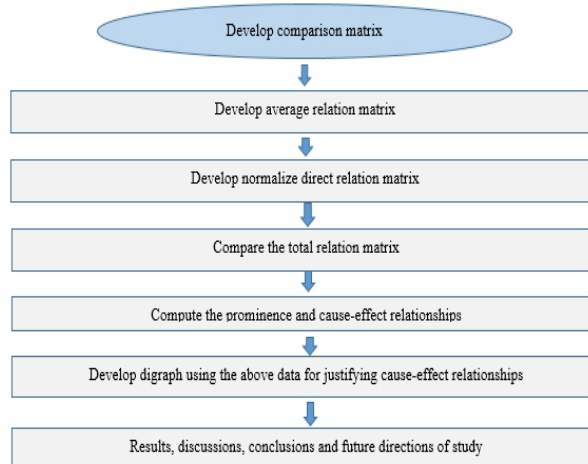


Fig 1. Process flowchart of research methodology

Firstly, a list of thirty barriers to sustainable supply chain management in the manufacturing field was enlisted by an extensive literature review. Secondly, collected barriers were grouped into five categories: economic, environmental, societal, management and stakeholder, and knowledge and technology that cover all aspects of sustainability. Applying thirty barriers to DEMATEL will be challenging to handle. So, the authors felt the urgency to narrow down the list of barriers. Thirdly, a group of experts in the apparel sector was formed, including academic, buying-house, and industry people. Fourthly, a questionnaire was designed and asked for a response from experts in a Likert scale range of 1-5 (where 5 = most prominent and 1 = least prominent). Finally, upon analyzing the experts' response, twelve barriers were excluded, and eighteen barriers were ready for the DEMATEL approach.

DEMATEL approach

The DEMATEL technique has gained popularity in recent decades, is a multi-criteria decision-making (MCDM) tool, usually used to analyze the interdependence of variables (R. J. Lin, 2013). In DEMATEL, variables are divided in cause and effect group to identify their causal relationship (Awasthi et al., 2014). This method has been applied in different fields previously, for example, manufacturing in Iran (Jalalifar et al., 2013), food packaging (Wang et al., 2016) and manufacturing (Gandhi et al., 2015) in India, the automobile industry in China (Xia et al., 2015) and leather industry in Bangladesh (Moktadir et al., 2018). DEMATEL ease the way of assigning value to influential factors (C. J. Lin & Wu, 2008). Another reason to choose DEMATEL over ISM and AHP is to uncover relationships among variables based on the severity of the effect on each other (Gandhi et al., 2015). It permits the transformation of qualitative research design into quantitative

analysis. Moreover, the application of DEMATEL in various domains has been fruitful (Wang et al., 2016). Therefore, it is apparent that the DEMATEL approach is practical for complex situations, and that is why it is selected for this study.

Step 1 (Direct Relation Matrix)

In this stage, respondents are requested to provide the degree of influence of one element on the other based on the DEMATEL scale. If there are p variables in a study, then $p \times p$ the matrix will form and the level of influence a_i on a_j denoted as a_{ij} .

Table 3. DEMATEL scale

Variable	Scale
No influence	0
Very low influence	1
Low influence	2
High influence	3
Very high influence	4

$$A = \begin{vmatrix} a_{11} & a_{1j} & a_{1n} \\ a_{i1} & a_{ij} & a_{in} \\ a_{ni} & a_{nj} & a_{nn} \end{vmatrix}$$

The $p \times p$ average matrix Z is the average of the respondents' feedback.

$$Z = \begin{vmatrix} 0 & Z_{1j} & Z_{1n} \\ Z_{i1} & Z_{ij} & Z_{in} \\ Z_{n1} & Z_{nj} & 0 \end{vmatrix}$$

Step 2 (Normalised Direct Relation Matrix)

Normalized direct relation matrix X is obtained by dividing the direct relation matrix Z by S where, $S = \max(\sum_{j=1}^n Z_{ij}, \sum_{i=1}^n Z_{ij})$, $X = Z/S$ and $X = [x_{ij}]_{n \times n}$ where $0 \leq x_{ij} \leq 1$

Step 3 (Total Relation Matrix)

The total relation matrix T provides both direct and indirect influence of variables instead of only indicating direct relations as of normalized direct matrix. Following equation of T :

$$T = X (I - X)^{-1}$$

Where I is the identity matrix

Step 4 (Net cause-effect Values)

Let R_i denotes the sum of the i th row, and C_j denotes the sum of the j th column in the total relation matrix T , where, $i = j = k = 1,2,3,4 \dots n$. Moreover, (R_i+C_j) represents a degree of influence of the variables, known as prominence value. Variable with higher the prominence value, more it can affect or be affected by other variables. The value of (R_i-C_j) reflects the total effect it can provide to the problem. If (R_i-C_j) is positive, then variables are classified as cause group. If (R_i-C_j) is negative, then variables are classified as effect groups.

Step 5 (Threshold Value)

A threshold value ∂ is fixed to separate variables from the total relation matrix T , which have negligible effects. It is necessary to choose (∂) value wisely. A higher (∂) value may miss some essential variables, while a lower (∂) value may invite some insignificant variables in the problem.

Results and Analysis

Table 4. Average Direct Relation Matrix

	EC1	EC2	EC3	EN1	EN2	EN3	EN5	SC1	SC3	SC5	SC6	KT2	KT5	KT6	KT7	MS2	MS3	MS4
EC1	0.000	3.286	3.429	2.571	2.429	1.714	1.857	2.286	1.429	3.286	1.714	2.286	2.714	2.571	2.857	2.714	3.429	3.000
EC2	3.429	0.000	3.143	3.714	3.000	3.000	2.429	2.714	2.000	3.143	1.714	1.571	3.143	3.429	3.714	2.714	3.000	3.143
EC3	4.000	3.429	0.000	0.714	0.429	2.857	2.429	0.714	1.714	2.143	0.571	1.857	1.714	1.857	3.000	2.714	2.857	2.143
EN1	3.714	3.143	0.286	0.000	0.429	2.571	3.571	0.857	3.000	1.857	2.429	3.143	0.857	1.000	3.429	2.857	2.571	3.143
EN2	2.857	3.000	0.857	1.000	0.000	0.714	0.429	0.857	2.286	2.857	2.429	2.571	0.571	0.714	2.286	3.143	3.714	3.000
EN3	1.857	2.714	2.000	2.286	0.000	0.000	2.714	2.429	3.000	1.429	3.429	3.143	1.714	1.714	2.857	3.143	2.857	3.429
EN5	4.000	3.143	3.286	4.000	0.571	3.000	0.000	4.000	3.143	1.429	2.000	3.143	1.143	1.429	2.429	3.286	3.000	2.571
SC1	3.000	3.429	0.143	0.286	0.714	3.143	3.286	0.000	1.143	0.429	2.000	2.857	1.571	2.000	2.286	1.429	3.000	2.000
SC3	1.714	2.143	1.000	3.143	3.000	3.000	3.429	1.714	0.000	1.714	2.429	2.429	1.143	1.571	2.143	0.429	2.714	2.429
SC5	4.000	3.143	0.143	1.286	3.143	1.857	1.000	0.286	1.429	0.000	2.571	2.714	0.143	0.143	2.000	0.429	3.000	3.143
SC6	2.143	2.143	0.000	2.571	3.000	3.571	1.714	2.429	2.714	2.714	0.000	2.000	0.429	0.857	1.571	3.000	2.857	2.714
KT2	3.143	2.286	1.714	3.143	2.857	3.143	3.429	2.143	3.143	2.000	2.286	0.000	0.571	0.429	3.857	3.143	3.571	3.429
KT5	3.286	3.000	0.571	0.429	0.286	0.571	7.143	0.429	0.429	0.000	0.286	0.571	0.000	4.000	2.571	0.429	2.857	1.714
KT6	3.429	3.571	0.286	0.000	0.143	0.571	2.857	0.429	0.714	0.143	0.000	0.429	3.286	0.000	0.571	0.571	2.714	2.429
KT7	4.000	3.714	1.857	2.857	0.571	2.286	3.714	0.857	3.143	0.429	3.571	3.571	0.429	1.857	0.000	4.000	3.857	2.857
MS2	2.429	2.429	2.857	2.714	3.714	3.000	2.714	1.571	0.429	0.286	3.143	2.714	0.429	0.429	1.857	0.000	3.143	3.286
MS3	3.857	2.571	3.143	2.143	3.429	2.857	2.714	3.000	3.286	3.000	2.714	3.857	3.000	3.143	3.000	3.143	0.000	2.857
MS4	3.429	3.429	1.857	3.571	2.857	2.857	1.714	1.857	2.571	3.000	2.429	3.571	2.286	2.857	3.286	3.429	3.143	0.000

Table 4 depicts the average direct relation matrix, representing responses garnered from a focus group of experts, including academia,

industry, and buying-house. After receiving the individual respondent's initial response, the average of the responses was taken for the next step.

Table 5. Normalized Relation Matrix

	EC1	EC2	EC3	EN1	EN2	EN3	EN5	SC1	SC3	SC5	SC6	KT2	KT5	KT6	KT7	MS2	MS3	MS4
EC1	0.000	0.064	0.066	0.050	0.047	0.033	0.036	0.044	0.028	0.064	0.033	0.044	0.052	0.050	0.055	0.052	0.066	0.058
EC2	0.066	0.000	0.061	0.072	0.058	0.058	0.047	0.052	0.039	0.061	0.033	0.030	0.061	0.066	0.072	0.052	0.058	0.061
EC3	0.077	0.066	0.000	0.014	0.008	0.055	0.047	0.014	0.033	0.041	0.011	0.036	0.033	0.036	0.058	0.052	0.055	0.041
EN1	0.072	0.061	0.006	0.000	0.008	0.050	0.069	0.017	0.058	0.036	0.047	0.061	0.017	0.019	0.066	0.055	0.050	0.061
EN2	0.055	0.058	0.017	0.019	0.000	0.014	0.008	0.017	0.044	0.055	0.047	0.050	0.011	0.014	0.044	0.061	0.072	0.058
EN3	0.036	0.052	0.039	0.044	0.000	0.000	0.052	0.047	0.058	0.028	0.066	0.061	0.033	0.033	0.055	0.061	0.055	0.066
EN5	0.077	0.061	0.064	0.077	0.011	0.058	0.000	0.077	0.061	0.028	0.039	0.061	0.022	0.028	0.047	0.064	0.058	0.050
SC1	0.058	0.066	0.003	0.006	0.014	0.061	0.064	0.000	0.022	0.008	0.039	0.055	0.030	0.039	0.044	0.028	0.058	0.039
SC3	0.033	0.041	0.019	0.061	0.058	0.058	0.066	0.033	0.000	0.033	0.047	0.047	0.022	0.030	0.041	0.008	0.052	0.047
SC5	0.077	0.061	0.003	0.025	0.061	0.036	0.019	0.006	0.028	0.000	0.050	0.052	0.003	0.003	0.039	0.008	0.058	0.061
SC6	0.041	0.041	0.000	0.050	0.058	0.069	0.033	0.047	0.052	0.052	0.000	0.039	0.008	0.017	0.030	0.058	0.055	0.052
KT2	0.061	0.044	0.033	0.061	0.055	0.061	0.066	0.041	0.061	0.039	0.044	0.000	0.011	0.008	0.075	0.061	0.069	0.066
KT5	0.064	0.058	0.011	0.008	0.006	0.011	0.138	0.008	0.008	0.000	0.006	0.011	0.000	0.077	0.050	0.008	0.055	0.033
KT6	0.066	0.069	0.006	0.000	0.003	0.011	0.055	0.008	0.014	0.003	0.000	0.008	0.064	0.000	0.011	0.011	0.052	0.047
KT7	0.077	0.072	0.036	0.055	0.011	0.044	0.072	0.017	0.061	0.008	0.069	0.069	0.008	0.036	0.000	0.077	0.075	0.055
MS2	0.047	0.047	0.055	0.052	0.072	0.058	0.052	0.030	0.008	0.006	0.061	0.052	0.008	0.008	0.036	0.000	0.061	0.064
MS3	0.075	0.050	0.061	0.041	0.066	0.055	0.052	0.058	0.064	0.058	0.052	0.075	0.058	0.061	0.058	0.061	0.000	0.055
MS4	0.066	0.066	0.036	0.069	0.055	0.055	0.033	0.036	0.050	0.058	0.047	0.069	0.044	0.055	0.064	0.066	0.061	0.000

Dividing each cell value by the maximum value of the sum of the rows (51.71), the normalized relation matrix (Table 5) is calculated.

Table 6. Total Relation Matrix

	EC1	EC2	EC3	EN1	EN2	EN3	EN5	SC1	SC3	SC5	SC6	KT2	KT5	KT6	KT7	MS2	MS3	MS4
EC1	0.215	0.259	0.181	0.202	0.175	0.198	0.217	0.164	0.174	0.187	0.179	0.216	0.156	0.172	0.230	0.219	0.269	0.244
EC2	0.300	0.300	0.220	0.239	0.234	0.237	0.248	0.260	0.200	0.197	0.196	0.222	0.176	0.201	0.264	0.237	0.284	0.268
EC3	0.252	0.229	0.104	0.147	0.118	0.111	0.198	0.118	0.155	0.146	0.136	0.180	0.123	0.140	0.204	0.112	0.225	0.199
EN1	0.185	0.242	0.121	0.153	0.133	0.206	0.235	0.136	0.196	0.155	0.187	0.223	0.115	0.134	0.230	0.214	0.241	0.236
EN2	0.222	0.212	0.113	0.147	0.111	0.148	0.151	0.115	0.113	0.111	0.166	0.188	0.095	0.112	0.185	0.194	0.233	0.108
EN3	0.238	0.239	0.151	0.195	0.127	0.162	0.226	0.165	0.198	0.148	0.206	0.225	0.133	0.150	0.223	0.221	0.250	0.244
EN5	0.299	0.268	0.188	0.241	0.150	0.235	0.195	0.206	0.215	0.162	0.196	0.144	0.135	0.159	0.236	0.242	0.274	0.250
SC1	0.223	0.218	0.101	0.133	0.116	0.190	0.205	0.101	0.140	0.109	0.154	0.190	0.115	0.137	0.183	0.163	0.218	0.187
SC3	0.214	0.208	0.250	0.266	0.165	0.197	0.217	0.139	0.129	0.142	0.172	0.195	0.111	0.134	0.192	0.156	0.226	0.207
SC5	0.231	0.205	0.094	0.145	0.160	0.159	0.150	0.100	0.140	0.101	0.161	0.182	0.083	0.096	0.172	0.139	0.210	0.201
SC6	0.221	0.100	0.103	0.183	0.169	0.209	0.185	0.152	0.178	0.160	0.131	0.189	0.098	0.120	0.182	0.201	0.229	0.214
KT2	0.281	0.250	0.159	0.226	0.191	0.235	0.252	0.171	0.216	0.172	0.202	0.187	0.120	0.137	0.258	0.139	0.282	0.263
KT5	0.211	0.194	0.185	0.120	0.092	0.125	0.257	0.099	0.111	0.088	0.105	0.130	0.078	0.163	0.169	0.127	0.195	0.162
KT6	0.180	0.174	0.266	0.088	0.074	0.100	0.155	0.078	0.093	0.074	0.078	0.101	0.124	0.074	0.109	0.103	0.162	0.147
KT7	0.294	0.272	0.163	0.255	0.150	0.219	0.257	0.150	0.214	0.144	0.221	0.248	0.120	0.163	0.186	0.253	0.285	0.251
MS2	0.235	0.221	0.160	0.192	0.184	0.205	0.254	0.142	0.144	0.123	0.263	0.207	0.102	0.250	0.195	0.157	0.242	0.230
MS3	0.319	0.279	0.196	0.222	0.214	0.246	0.263	0.198	0.232	0.203	0.222	0.272	0.178	0.201	0.262	0.255	0.242	0.274
MS4	0.298	0.281	0.286	0.238	0.197	0.235	0.234	0.170	0.211	0.195	0.209	0.257	0.158	0.188	0.257	0.250	0.286	0.211

Threshold Value (δ) = 0.187

Table 7. Sum of influence given and received on barriers

Barriers	R _i	C _j	R _i +C _j	R _i -C _j
EC1	3.658	4.417	8.074	-0.759
EC2	4.282	4.152	8.434	0.130
EC3	2.898	3.041	5.939	-0.143
EN1	3.342	3.390	6.731	-0.048
EN2	2.723	2.760	5.483	-0.037
EN3	3.501	3.417	6.918	0.084
EN5	3.793	3.898	7.692	-0.105
SC1	2.883	2.664	5.547	0.219
SC3	3.319	3.059	6.377	0.260
SC5	2.730	2.617	5.346	0.113
SC6	3.024	3.183	6.207	-0.159
KT2	3.742	3.558	7.300	0.184
KT5	2.611	2.220	4.830	0.391
KT6	2.179	2.730	4.910	-0.551
KT7	3.844	3.737	7.582	0.107
MS2	3.507	3.381	6.888	0.125
MS3	4.278	4.354	8.632	-0.076
MS4	4.162	3.896	8.058	0.265

R_i+C_j denotes the degree of the relative importance of barriers known as prominence value. Variables with a higher R_i+C_j value, more likely to affect or be affected by other variables. The R_i-C_j value represents the total effect it cast on the overall problem. The positive value of R_i-C_j means it will affect others, while the negative value of R_i-C_j says it will be affected by other variables.

Table 8. Degree of the relative importance of each barrier

Rank	Barriers	R _i +C _j
1	MS3	8.632
2	EC2	8.434
3	EC1	8.074
4	MS4	8.058
5	EN5	7.692
6	KT7	7.582
7	KT2	7.300
8	EN3	6.918
9	MS2	6.888
10	EN1	6.731
11	SC3	6.377
12	SC6	6.207
13	EC3	5.939
14	SC1	5.547
15	EN2	5.483
16	SC5	5.346
17	KT6	4.910
18	KT5	4.830

Table 9. Cause-effect group

Rank	Cause group	Ri-Cj
1	KT5	0.391
2	MS4	0.265
3	SC3	0.260
4	SC1	0.219
5	KT2	0.184
6	EC2	0.130
7	MS2	0.125
8	SC5	0.113
9	KT7	0.107
10	EN3	0.084
Rank	Effect group	Ri-Cj
1	EC1	-0.759
2	KT6	-0.551
3	SC6	-0.159
4	EC3	-0.143
5	EN5	-0.105
6	MS3	-0.076
7	EN1	-0.048
8	EN2	-0.037

From Table 8, according to prominence value, lack of stakeholder's involvement (MS3), High costs of sustainability adoption (EC2), Insignificant financial gains (EC1), lack of supply chain integration (MS4), Lack of buying firms environmental mission (EN5) are the top five barriers to consider. From Table 9, barriers with positive R_i-C_j value are cause group, and barriers with negative R_i-C_j value are effect group. Under cause group, there are ten barriers, namely, lack of information technology (KT5), Lack of government support and policies (MS4), Insufficient society pressure (SC3), Lack of supply chain integration (SC1), Insignificant financial gains (KT2), Lack of eco-literacy among supply chain stakeholders (EC2), Lack of top management commitment (MS2), Complexity in measuring and monitoring the environmental practice of suppliers (SC5), demand for a lower price (KT7), Lack of cooperation with research institutes (EN3). Among the cause group, Lack of information technology (KT5), Lack of government support and policies (MS4), Insufficient society pressure (SC3) ranked highest.

Under effect group, there are eight barriers which are, High costs of sustainability adoption (EC1), lack of resource and capability (KT6), Lack of Reverse logistics (SC6), Market competition and uncertainty (EC3), Lack of buying firms environmental mission (EN5), Lack of employee motivation (MS3), Lack of adoption of new technology and processes (EN1), Lack of stakeholders involvement (EN2). Among the effect group, High costs of sustainability adoption (EC1), lack of resource and capability (KT6), Lack of Reverse logistics (SC6) ranked as the top three.

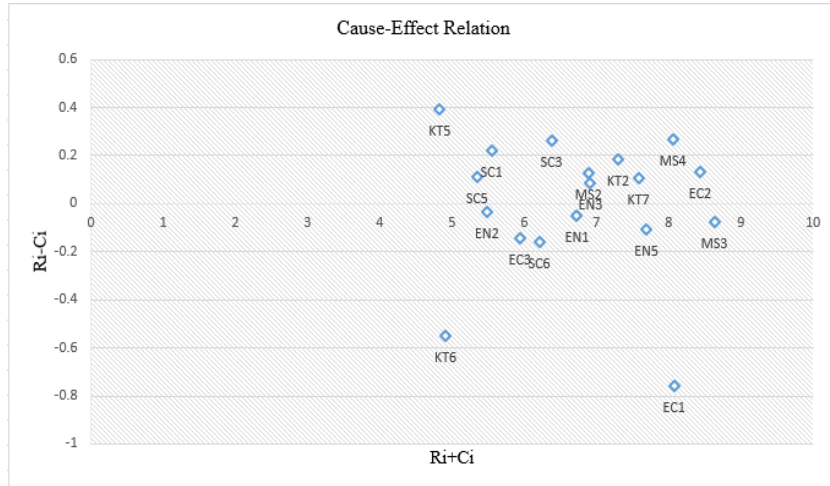


Fig 2. Causal Diagram

From the causal diagram, KT5, MS4, and SC3 are the critical barriers for SSCM adoption in the T&A sector of Bangladesh. According to relative importance, MS3, EC2, and EC1 are the top three barriers among eighteen barriers.

Discussion

Research outcome shows ten cause barriers and eight effect barriers. In this section, the authors tried to delineate how each of the cause barriers stirs each effect barrier. The authors proposed corrective action to address each cause barriers, which consequently mitigate the effect barriers.

Lack of information technology can result in a lack of adoption of new technology and processes. The scarcity of information technology and experts in this particular area hinders the adoption of new technology and operations. The textile and apparel industry should adapt itself with relevant information technology and prepare experts to smooth the latest technology transfer, installation, and adaptation to address this challenge.

Absence of government support and policies trigger the high cost of sustainability adoption. Without government financial support and sustainability-friendly policies, the textile and apparel sector cannot make any significant footsteps in their way to achieving sustainability in supply chain management. To address this issue, the government should offer financial incentives to the textile and apparel industry and construct a set of guidelines that will be easy to integrate.

Lack of insufficient society pressure for sustainable products influences the absence of reverse logistics. It is the society (customers, consumers) from where the demand for sustainability (through sustainable products) should come forward in the first place. Upon massive pull for

sustainable products, manufacturers will integrate reverse logistics in their supply chain. To address this barrier, dissemination of sustainability concepts and advantageous facets of sustainability can be handy.

Lack of supply chain integration engenders the effects of reverse logistics, market competition, and uncertainty. Forward and backward integration is a prerequisite for supply chain management to keep reverse logistics functional. The textile and apparel sector should extend its supply chain on the supplier's side and customer's side to reuse, remake, and recycle textile and apparel products.

Insignificant financial gains breed the effects of lack of resources and capability and lack of employee motivation. Predisposed concept of less economic turn out from sustainability endeavour deters organization from acquiring new resource and uplift caliber. High investment but less turn out, which is true partly initially, sway the industry from sustainability. In the end, financial gains outnumbered the initial cost. The textile and apparel sector should be well informed about the societal, environmental benefits, and economic outcome, which may change the organization's perception and facilitate new resource acquisition and capability enhancement.

Lack of eco-literacy causes a downfall of stakeholder involvement. Stakeholders in the textile and apparel supply chain feel uninterested in complying with the sustainability approach without convincing financial gain and tangible benefits. Extensive training and seminar program about sustainable supply chain management can be a potent tactic to educate the stakeholders. Eco-literacy programs can engender the urge among stakeholders to participate in the sustainability movement for economic, societal, and environmental gain and confirm the generations' wellbeing.

The lack of top management's commitment is reflected in the absence of resources, capability, and stakeholder involvement. It is the top management of the organization who beholds the power of decision-making. The mission and vision of organizations reflect top management's strategic planning and level of thinking. To address this barrier, top management from all the textile and apparel supply chain firms should come forward simultaneously and comply with sustainability initiatives. Top management should evince their commitment through active participation to ease new resource acquisition and confirm stakeholder's involvement.

Difficulty in measuring and regulating environmental practices resulted in lack of buying house's environmental mission. Buying firms can be the harbinger of sustainability adoption in the textile and apparel supply chain. To some extent, buying firms can create pressure on manufacturers. Measuring and monitoring suppliers' environmental practices in the tortuous textile and apparel supply chain has never been easy to resist buying firms from fulfilling their environmental mission. It is essential to install a flexible

method to measure and monitor all the participatory firms' environmental practices in the textile and apparel supply chain, which may increase firms' accountability for their practices. Demand for lower prices instigates market competition and uncertainty. One of the fundamental barriers to sustainability is the demand for lower prices from the consumer end. To satiate customers with cheap products, manufacturers act crazy and unsettled the whole market. Manufacturers often show no mercy to the environment to stay competitive and gain a small profit margin. Consumers have to be willing to pay a little extra for sustainable products. Consumers' commitment to sustainable goods can positively drive the textile and apparel supply chain.

Conclusion

This study explores the challenges to sustainable supply chain management in Bangladesh's textile and apparel sector with the DEMATEL technique. At the first stage of this study, challenges to sustainable supply chain management in the manufacturing, automobile, leather, and textile industry in India, China, Bangladesh, and other south Asian countries are collected through extensive literature review. Secondly, collected barriers are categorized into economic, environmental, societal, knowledge and technology, management, and stakeholder groups. Thirdly, opinion from expert focus groups is taken into account to justify the barriers and narrow down the list of barriers to ensure the most influential ones. Finally, the collection of data and analysis are completed using the DEMATEL approach.

This study is the first of its kind, in the textile and apparel sector of Bangladesh. Previous research explores sustainability adoption in supply chain management, sticking to the limited subset of sustainability concepts and dealing with environmental concerns only. Aggregation of sustainability subset: knowledge and technology, management, and stakeholder's commitment strengthen this study's outcome. Moreover, this study unravels the cause-effect relationship between the barriers and proposed corrective action to address the cause of barriers.

There are a few limitations in this study, which set the direction for future works. There is a scope to identify and collect more barriers from the extensive literature review. It is possible to include more categories of barriers to make the research work more comprehensive. Response for the DEMATEL matrix can be increased. This study can be stretched to a similar field in other countries. Different MCDM tools like ISM, AHP, and TOPSIS can be deployed to see the research outcome's difference.

References:

1. Awasthi, A., Grzybowska, K., Awasthi, A., & Grzybowska, K. (2014). Barriers of the Supply Chain Integration. Springer, 15–30. https://doi.org/10.1007/978-3-319-07287-6_2
2. Bank, B. (n.d.). Quarterly Review on RMG: April-June FY'20 1.
3. Bansal, P., & Roth, K. (2000). Why Companies Go Green: A Model of Ecological Responsiveness. *Academy of Management Journal*, 43(4), 717–736. <https://doi.org/10.5465/1556363>
4. Carter, C. R., & Liane Easton, P. (2011). Sustainable supply chain management: Evolution and future directions. *International Journal of Physical Distribution & Logistics Management*, 41(1), 46–62. <https://doi.org/https://doi.org/10.1108/09600031111101420>
5. Carter, Craig R., & Easton, P. L. (2011). Sustainable supply chain management: Evolution and future directions. In *International Journal of Physical Distribution and Logistics Management* (Vol. 41, Issue 1, pp. 46–62). Emerald Group Publishing Limited. <https://doi.org/10.1108/09600031111101420>
6. Ciliberti, F., Pontrandolfo, P., & Scozzi, B. (2008). Investigating corporate social responsibility in supply chains: an SME perspective. *Journal of Cleaner Production*, 16(15), 1579–1588. <https://doi.org/10.1016/j.jclepro.2008.04.016>
7. Coronavirus: Bangladesh's garment industry risks collapse | Asia | An in-depth look at news from across the continent | DW | 25.03.2020. (n.d.). Retrieved January 13, 2021, from <https://www.dw.com/en/coronavirus-bangladeshs-garment-industry-risks-collapse/a-52917410>
8. Diabat, A., & Govindan, K. (2011). An analysis of the drivers affecting the implementation of green supply chain management. *Resources, Conservation and Recycling*, 55(6), 659–667. <https://doi.org/10.1016/j.resconrec.2010.12.002>
9. EM, P., & C., V. der L. (1995). Green and competitive: ending the stalemate. *Harvard Business Review*, 73(5), 120–134.
10. Font, X., Tapper, R., Schwartz, K., & Kornilaki, M. (2008). Sustainable supply chain management in tourism. *Business Strategy and the Environment*, 17(4), 260–271. <https://doi.org/10.1002/bse.527>
11. Gandhi, S., Mangla, S. K., Kumar, P., & Kumar, D. (2015). “Evaluating Factors in Implementation of Successful Green Supply Chain Management Using DEMATEL: A Case Study.” *International Strategic Management Review*, 3(1–2), 96–109.
12. Gardas, B. B., Raut, R. D., & Narkhede, B. (2018). Modeling the challenges to sustainability in the textile and apparel (T&A) sector: A

- Delphi-DEMATEL approach. *Sustainable Production and Consumption*, 15, 96–108. <https://doi.org/10.1016/j.spc.2018.05.001>
13. Govindan, K., Diabat, A., & Shankar, K. M. (2015). Analyzing the Drivers of Green Manufacturing with Fuzzy Approach. *Journal of Cleaner Production*, 96, 182–193.
 14. Govindan, Kannan, Kaliyan, M., Kannan, D., & Haq, A. N. (2014). Barriers analysis for green supply chain management implementation in Indian industries using analytic hierarchy process. *International Journal of Production Economics*, 147(PART B), 555–568. <https://doi.org/10.1016/j.ijpe.2013.08.018>
 15. Harland, C. M. (1996). Supply chain management: Relationships, chains, and networks. *British Journal of Management*, 7(SPEC. ISS.). <https://doi.org/10.1111/j.1467-8551.1996.tb00148.x>
 16. Hassini, E., Surti, C., & Searcy, C. (2012). A literature review and a case study of sustainable supply chains with a focus on metrics. *International Journal of Production Economics*, 140(1), 69–82. <https://doi.org/10.1016/j.ijpe.2012.01.042>
 17. Islam, M. H., Sarker, M. R., Hossain, M. I., Ali, K., & Noor, K. M. A. (2020). Towards Sustainable Supply Chain Management (SSCM): A Case of Leather Industry. *Journal of Operations and Strategic Planning*, 2516600X2092431. <https://doi.org/10.1177/2516600x20924313>
 18. Jalalifar, S., Hafshejani, K. F., & Movahedi., M. (2013). Evaluation of the Effective Barriers in GSCM Implementation Using DEMATEL Method (Case Study: Iran Khodro CO.”). *Nature and Science*, 11(11), 95–102.
 19. Kaur, J., Sidhu, R., Awasthi, A., Chauhan, S., & Goyal, S. (2018). A DEMATEL based approach for investigating barriers in green supply chain management in Canadian manufacturing firms. *International Journal of Production Research*, 56(1–2), 312–332. <https://doi.org/10.1080/00207543.2017.1395522>
 20. Khan, M., Hussain, M., Gunasekaran, A., Ajmal, M. M., & Helo, P. T. (2018). Motivators of social sustainability in healthcare supply chains in the UAE—Stakeholder perspective. *Sustainable Production and Consumption*, 14, 95–104. <https://doi.org/10.1016/j.spc.2018.01.006>
 21. Koberg, E., & Longoni, A. (2019). A systematic review of sustainable supply chain management in global supply chains. *Journal of Cleaner Production*, 207, 1084–1098. <https://doi.org/10.1016/j.jclepro.2018.10.033>
 22. Lin, R. J. (2013). Using fuzzy DEMATEL to evaluate the green supply chain management practices. *Journal of Cleaner Production*, 40, 32–39. <https://doi.org/10.1016/j.jclepro.2011.06.010>

23. Lintukangas, K., Kähkönen, A. K., & Ritala, P. (2016). Supply risks as drivers of green supply management adoption. *Journal of Cleaner Production*, 112, 1901–1909. <https://doi.org/10.1016/j.jclepro.2014.10.089>
24. Lorek, S., & Spangenberg, J. H. (2014). Sustainable consumption within a sustainable economy - Beyond green growth and green economies. *Journal of Cleaner Production*, 63, 33–44. <https://doi.org/10.1016/j.jclepro.2013.08.045>
25. Luthra, S., Kumar, V., Kumar, S., & Haleem, A. (2011). Barriers to implement green supply chain management in automobile industry using interpretive structural modeling technique-an Indian perspective. *Journal of Industrial Engineering and Management*, 4(2), 231–257. <https://doi.org/10.3926/jiem.2011.v4n2.p231-257>
26. Luthra, S., Mangla, S. K., Xu, L., & Diabat, A. (2016). Using AHP to evaluate barriers in adopting sustainable consumption and production initiatives in a supply chain. *International Journal of Production Economics*, 181, 342–349. <https://doi.org/10.1016/j.ijpe.2016.04.001>
27. Majumdar, A., & Sinha, S. K. (2019). Analyzing the barriers of green textile supply chain management in Southeast Asia using interpretive structural modeling. *Sustainable Production and Consumption*, 17, 176–187. <https://doi.org/10.1016/j.spc.2018.10.005>
28. Marshall, D., McCarthy, L., McGrath, P., & Claudy, M. (2015). Going above and beyond: How sustainability culture and entrepreneurial orientation drive social sustainability supply chain practice adoption. *Supply Chain Management*, 20(4), 434–454. <https://doi.org/10.1108/SCM-08-2014-0267>
29. Mathiyazhagan, K., Govindan, K., NoorulHaq, A., & Geng, Y. (2013). An ISM approach for the barrier analysis in implementing green supply chain management. *Journal of Cleaner Production*, 47, 283–297. <https://doi.org/10.1016/j.jclepro.2012.10.042>
30. Moktadir, M. A., Ali, S. M., Rajesh, R., & Paul, S. K. (2018). Modeling the interrelationships among barriers to sustainable supply chain management in the leather industry. *Journal of Cleaner Production*, 181, 631–651. <https://doi.org/10.1016/j.jclepro.2018.01.245>
31. Mont, O., Neuvonen, A., & Lähteenoja, S. (2014). Sustainable lifestyles 2050: Stakeholder visions, emerging practices, and future research. *Journal of Cleaner Production*, 63, 24–32. <https://doi.org/10.1016/j.jclepro.2013.09.007>
32. Muduli, K., Govindan, K., Barve, A., & Geng, Y. (2013). Barriers to green supply chain management in Indian mining industries: A graph-

- theoretic approach. *Journal of Cleaner Production*, 47, 335–344. <https://doi.org/10.1016/j.jclepro.2012.10.030>
33. Pomponi, F., Moghayedi, A., Alshawawreh, L., D’Amico, B., & Windapo, A. (2019). Sustainability of post-disaster and post-conflict sheltering in Africa: What matters? *Sustainable Production and Consumption*, 20, 140–150. <https://doi.org/10.1016/j.spc.2019.06.007>
34. Prakash, C., & Barua, M. K. (2015). Integration of AHP-TOPSIS method for prioritizing the solutions of reverse logistics adoption to overcome its barriers under fuzzy environment. *Journal of Manufacturing Systems*, 37, 599–615. <https://doi.org/10.1016/j.jmsy.2015.03.001>
35. Rajeev, A., Pati, R. K., Padhi, S. S., & Govindan, K. (2017). Evolution of sustainability in supply chain management: A literature review. *Journal of Cleaner Production*, 162, 299–314. <https://doi.org/10.1016/j.jclepro.2017.05.026>
36. RMG industry as the major employment sector | The Daily Star. (n.d.). Retrieved January 13, 2021, from <https://www.thedailystar.net/supplements/28th-anniversary-supplements/entrepreneurship-key-youth-employment/news/rmg-industry-the-major-employment-sector-1702951>
37. Sajjad, A., Eweje, G., & Tappin, D. (2015). Sustainable Supply Chain Management: Motivators and Barriers. *Business Strategy and the Environment*, 24(7), 643–655. <https://doi.org/10.1002/bse.1898>
38. Sarker, M. R., Ahmed, F., Deb, A. K., & Chowdhury, M. (2018). Identifying barriers for implementing Green Supply Chain Management (Gscm) In footwear industry of Bangladesh: A Delphi study approach. *Leather and Footwear Journal*, 18(3), 175–186. <https://doi.org/10.24264/lfj.18.3.1>
39. Schönborn, G., Berlin, C., Pinzone, M., Hanisch, C., Georgoulas, K., & Lanz, M. (2019). Why social sustainability counts: The impact of corporate social sustainability culture on financial success. *Sustainable Production and Consumption*, 17, 1–10. <https://doi.org/10.1016/j.spc.2018.08.008>
40. Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for the sustainable supply chain management. *Journal of Cleaner Production*, 16(15), 1699–1710. <https://doi.org/10.1016/j.jclepro.2008.04.020>
41. Silvestre, B. S., Monteiro, M. S., Viana, F. L. E., & de Sousa-Filho, J. M. (2018). Challenges for sustainable supply chain management: When stakeholder collaboration becomes conducive to corruption. *Journal of Cleaner Production*, 194, 766–776. <https://doi.org/10.1016/j.jclepro.2018.05.127>

42. Slawinski, N., & Bansal, P. (2011). MANAGING THE TIME PARADOX IN BUSINESS SUSTAINABILITY. *Academy of Management Proceedings*, 2011(1), 1–6. <https://doi.org/10.5465/ambpp.2011.65870485>
43. Svensson, G., & Wagner, B. (2015). Implementing and managing economic, social, and environmental efforts of business sustainability propositions for measurement and structural models. *Management of Environmental Quality: An International Journal*. <https://doi.org/doi.org/10.1108/MEQ-09-2013-0099>
44. Taghikhah, F., Voinov, A., & Shukla, N. (2019). Extending the supply chain to address sustainability. In *Journal of Cleaner Production* (Vol. 229, pp.652–666). Elsevier Ltd. <https://doi.org/10.1016/j.jclepro.2019.05.051>
45. Tseng, M. L., Islam, M. S., Karia, N., Fauzi, F. A., & Afrin, S. (2019). A literature review on green supply chain management: Trends and future challenges. In *Resources, Conservation and Recycling* (Vol. 141, pp. 145–162). Elsevier B.V. <https://doi.org/10.1016/j.resconrec.2018.10.009>
46. Walker, H., Sisto, L. Di, & McBain, D. (2008). “Drivers and Barriers to Environmental Supply Chain Management Practices: Lessons from the Public and Private Sectors.” *Journal of Purchasing and Supply Management*, 14(1), 69–85.
47. Wang, Z., Mathiyazhagan, K., Xu, L., & Diabat, A. (2016). A decision-making trial and evaluation laboratory approach to analyze the barriers to Green Supply Chain Management adoption in a food packaging company. *Journal of Cleaner Production*, 117, 19–28. <https://doi.org/10.1016/j.jclepro.2015.09.142>
48. Xia, X., Govindan, K., & Zhu, Q. (2015). Analyzing Internal Barriers for Automotive Parts Remanufacturers in China Using GreyDEMATEL Approach. *Journal of Cleaner Production*, 87, 811–825.
49. Zhu, Qinghua, & Geng, Y. (2013). Drivers and barriers of extended supply chain practices for energy saving and emission reduction among Chinese manufacturers. *Journal of Cleaner Production*, 40, 6–12. <https://doi.org/10.1016/j.jclepro.2010.09.017>



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Les Politiques Publiques De Gestion Des Dechets Au Cameroun : Une Analyse Critique Du ‘Monopole’ D’hysacam A L'ere De La Gouvernance Decentralisee Dans La Ville De Yaounde

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Résumé

A mesure que le Cameroun se modernise, la question des déchets dans la ville de Yaoundé occupe une place importante dans l’agenda des élites politico-dirigeantes. La croissance démographique rapide et l’industrialisation croissante sont productrices d’une quantité débordante des déchets dont les effets sur la santé et la sécurité des populations se font ressentir. Cet article se veut une réflexion critique du monopole octroyé à HYSACAM dans la gestion technique des déchets dans la ville de Yaoundé. Sur le plan méthodologique, cette réflexion s’appuie sur la recherche documentaire, l’investigation auprès des institutions directement concernées et sur un protocole d’enquête essentiellement qualitative dressé aux populations de Yaoundé. En s’encrant sur l’incrémentalisme, elle met en exergue le tâtonnement et le bricolage qui caractérisent la politique de gestion des déchets dans la ville de Yaoundé. Dit autrement, la politique de gestion des déchets dans la ville de Yaoundé s’inscrit dans un schéma de débrouillardise et de tâtonnement permanent, se caractérisant par des va-et-vient et des essais-recommencements infinis. Cette

étude postule qu'on ne saurait envisager, en plein essor de la gouvernance décentralisée, une politique de gestion efficace des déchets en faisant abstraction au « marché » des partenaires techniques, qui suppose une démonopolisation d'HYSACAM dans la gestion technique des déchets dans la ville de Yaoundé.

Mots-clés: Gestion Des Déchets, Gouvernance Décentralisée, HYSACAM, Politiques Publiques, Yaoundé

Public Waste Management Policies In Cameroon: A Critical Analysis Of The Hysacam ‘Monopoly’ In The Era Of Decentralized Governance In The City Of Yaounde

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Abstract

As Cameroon modernizes, the issue of waste in the city of Yaoundé occupies an important place on the agenda of the political-ruling elites. Rapid population growth and increasing industrialization are producing an overflowing quantity of waste, the effects of which are felt on the health and safety of populations. This article is a critical analysis of the monopoly granted to HYSACAM in the technical management of waste in the city of Yaoundé. Methodologically, the research is based on documentary analysis, investigation of the institutions directly concerned and on an essentially qualitative survey protocol drawn up to the populations of Yaoundé. By focusing on the public policy theory of incrementalism, it highlights the trial and error and tinkering that characterize the waste management policy in the city of Yaoundé. In other words, the waste management policy in the city of Yaoundé is part of a scheme of resourcefulness and permanent groping, characterized by back and forth and endless re-starts. This study argues that, in the boom of decentralized governance, an effective waste management policy cannot be envisaged by disregarding the “market” of technical partners, which presupposes a demonopolization of HYSACAM in the technical management of waste in the city of Yaoundé.

Keywords: Decentralized Governance, HYSACAM, Public Policies, Waste Management Yaoundé.

Introduction

La question de l'assainissement et de l'aménagement du territoire urbain se pose avec acuité à mesure qu'augmentent la démographie et l'espace urbains. Au sens d'Henri-Michel Obe et Nicolas Brou Ahossi (2019), « cette évolution de la population, exceptionnelle par son ampleur et sa rapidité, s'accompagne de dynamiques spatiales nouvelles, tant en termes de migration de population que d'urbanisation » (p. 21). Cette situation suscite un intérêt à s'intéresser aux politiques publiques de gestion des déchets et de jeter un regard sur « le marché » qui se crée autour de ceux-ci. Comme le souligne Giorgio Blundo (2009), « au-delà des implications évidentes sur la qualité de vie et sur les conditions sanitaires des citoyens, l'hygiène et la salubrité urbaines représentent une entrée privilégiée pour l'analyse de la gouvernance locale » (p.113). Le marché de gestion des déchets au Cameroun donne à observer l'imbrication de deux dimensions : la dimension technique et la dimension politique. La dimension technique fait référence aux procédés de choix des « industries » de réassemblage, traitement, d'évacuation et de recyclage des déchets en fonction notamment des dispositifs technico-matériels (charrettes, bennes de ramassage et d'évacuation des déchets, engin de recyclage etc.) dont ils possèdent et de leur expérience en la matière. Elle renseigne également sur les technologies institutionnelles telles qu'elles se déploient. La dimension politique implique les jeux de pouvoir et d'intérêts des acteurs politiques impliqués dans la gestion des déchets, porteurs d'agendas divers. Elle permet de lire et de comprendre le pourquoi et le comment des dissonances compétencielles et des pesanteurs opérationnelles souvent observées. En effet, comme partout ailleurs, la gestion des déchets au Cameroun donne lieu à un véritable marché public dont le processus d'attribution laisse observer une circulation fluide de ressources financières et politiques (Maccaglia & Cirelli, 2019).

L'on a souvent rappelé que l'une des raisons d'être des politiques publiques est de mettre de l'ordre et en ordre une société du désordre. Elle concilie par-là, l'ordre et le désordre en sonnait le glas de leur dialectique (Freund, 1986). En soi, la fabrique des politiques publiques constitue en effet « une activité politique nécessaire qui enchante le monde en montrant que les problèmes de société sont solubles » (Zittoun, 2013, p. 321). Le problème de l'invasion des déchets dans les zones urbaines au Cameroun est soluble par le biais des politiques publiques efficaces. La question des déchets et d'assainissement de manière générale est l'un des défis majeurs des élites politiques locales, qui s'attèlent – même si timidement en contexte camerounais – à « faire de "l'ordre hygiénique" un enjeu de contrôle de

l'espace public et qui jouent souvent, dans cette entreprise, une partie de leur crédibilité et légitimité » (V. Blundo, *Ibid.*, p. 113). Elle est d'autant plus préoccupante qu'elle est étroitement liée à la santé des citoyens, du sol et à l'environnement. Analyser les politiques publiques de gestion des déchets c'est penser les modalités à partir desquelles l'Etat se fait du souci pour ses populations, les prend en souci (le souci populationnel) (Machikou, 2010, p.126) à l'effet de leur donner santé et vie. A partir de là, on voit s'établir une corrélation étroite entre les notions de biopouvoir et de biopolitique chères à Foucault (1975 ; 1997) et l'analyse des politiques de gestion des déchets.

La littérature sur la question des déchets en sciences sociales aborde la question suivant diverses perspectives. D'abord sous le prisme des politiques environnementales, cette perspective regroupe les travaux sur les initiatives locales relatives à la promotion « des formes innovantes et alternatives de traitement des déchets (...), ainsi que les travaux s'intéressant aux dimensions sociales des activités de récupération » (V. Maccaglia & Cirelli, *Ibid.*). Ensuite, la perspective qui rassemble des travaux s'employant à démontrer que l'installation ou l'exploitation des équipements de traitement des déchets a souvent donné lieu à des conflits entre les citoyens et la société civil désireux de s'impliquer, si non de prendre en charge la gestion des déchets et les décideurs publics qui les confient plutôt aux industriels et aux experts. La technicité (en termes de dispositifs technologiques et mécaniques) et la complexité du problème contraignent l'Etat à se tourner vers des partenaires externes ou privés et à sous-traiter avec eux pour essayer de le résoudre. C'est le cas dans la ville de Yaoundé avec la société Hygiène et Salubrité du Cameroun (HYSACAM). Enfin, la perspective visant à établir le rapport des populations aux déchets et « les enjeux éthiques de leur prise en charge (...) ». Cette approche interroge tout particulièrement la dimension éthique et « les jeux de caractérisation morale » de la promotion des pratiques de tri et de recyclage en mettant en lumière le caractère politique du déchet (Ortar & Anstett, 2017). Cet article questionne le choix des partenaires et des instruments et querelle la centralisation et monopolisation de la gestion des déchets dans la ville de Yaoundé par HYSACAM, là où la gouvernance appelle à une décentralisation de celle-ci par la diversification des partenaires techniques.

En effet, de nombreuses initiatives vont être prises par le gouvernement pour tenter de résoudre le problème de l'insalubrité dans la ville de Yaoundé. En 2004, il sera mis en place le Comité interministériel de gestion des déchets, un organe mixte dont le rôle est de prendre les décisions, planifier et coordonner les projets sur les déchets. C'est à HYSACAM que reviendra l'exclusivité concessionnaire de gestion des déchets dans la ville de Yaoundé. De nombreux travaux s'attèleront à mettre à nu les difficultés auxquelles un tel monopole a conduit (Sidi Ould, 2006 ; Ademe, 2004 ; Enda Malgreb, 2003

; Matejka, 2005). On notera par exemple des insuffisances institutionnelles, organisationnelles, matérielles et financières qui ont pour corollaire l'inefficacité de la politique de gestion des déchets dans la ville de Yaoundé. Entre 1968 et 1993 HYSACAM n'arrive à desservir que le centre-ville et les grands axes (Ngambi, 2015). Cet article passe en revue, et ce de manière critique, les politiques publiques de gestion des déchets au Cameroun en mettant un accent sur ce rôle monopolistique d'HYSACAM dans la ville de Yaoundé. Il débouche sur un examen prescriptif en proposant au gouvernement, à partir d'une perspective de la gouvernance décentralisée et du partenariat, des éléments d'ajustement de la politique publique de gestion des déchets existante dans la ville de Yaoundé.

Ainsi, après avoir décliné les éléments méthodologiques et théoriques sur lesquels cette réflexion s'appuie, l'analyse s'emploie à examiner d'abord le monopole d'HYSACAM dans la gestion technique des déchets dans la ville de Yaoundé, comme une logique antipodique du marché et de la gouvernance publique. Ensuite, elle établit le constat que la politique de gestion des déchets dans la ville de Yaoundé est une politique incrémentale et rationnellement limitée, et débouche enfin sur la possible réinvention de celle-ci en mettant en exergue le rôle de la gouvernance décentralisée.

Cadre théorique et méthodologique de l'étude

Le lieu de l'étude

Yaoundé, capitale politique du Cameroun est peuplée d'environnement de 4 100 000 d'habitants en 2019. Constituée de sept arrondissements (Yaoundé 1 (Nlongkak) ; Yaoundé 2 (Tsinga) ; Yaoundé 3 (Efoulan) ; Yaoundé 4 (Kondengui) ; Yaoundé 5 (Essos) ; Yaoundé 6 (Biyem-Assi) et Yaoundé 7 (Nkolbisson)), la ville s'étend sur 304 km² dont une superficie urbanisée de 183 km².

Le socle théorique de la réflexion : l'incrémentalisme

Cet article s'appuie théoriquement sur l'incrémentalisme. Souvent associé aux travaux de Charles Lindblom (1979), l'incrémentalisme dans l'analyse des politiques publiques tend à montrer que « les décideurs politiques réalisent généralement des changements de l'action publique qui ne modifient que marginalement la situation en cours ou le statu quo ». Ils n'accordent pas une place importante au « changement radical », à l'évolution de la situation, encore moins à « toute réforme substantielle des politiques préalablement menées (...). Les décisions prises provoquent plutôt des petits ajustements marginaux, ou incrémentaux, qui visent à améliorer une action publique existante, sans réellement la remettre en question » (Jönsson, 2010, p. 317). Les ajustements en questions résultent des tâtonnements et d'une multiplicité des négociations à petite échelle qui font intervenir diverses

rationalités. En se nourrissant des travaux d'Herbert Simon (1945) sur la rationalité limitée, l'incrémentalisme donne à voir comment le monopole technique octroyé à HYSACAM dans la gestion des déchets dans la ville de Yaoundé ne permet pas d'aboutir à une politique efficace ou optimale de gestion des déchets dans ladite ville.

Description de la démarche méthodologique : techniques de collecte des données sur le terrain, échantillon et durée d'investigation

Sur le plan méthodologique, cette réflexion s'appuie sur la recherche documentaire, l'investigation auprès des institutions directement concernées (Communauté urbaine de Yaoundé, l'ensemble des sept mairies de Yaoundé, le ministère de l'habitat et du développement urbain (MINH DU), HYSACAM-Yaoundé) et sur un protocole d'enquête essentiellement qualitative dressé aux populations de Yaoundé. L'étude a retenu un échantillon de dix ménages (10) par commune, soit soixante-et-dix (70) ménages au total. Il s'agissait d'évaluer l'appréciation de la politique de gestion des déchets par les populations. Le travail de terrain s'est étalé sur une période de dix (10) jours, soit du 14 novembre au 24 novembre 2020. On le voit donc, la démarche de vérification des données qui a été usitée est l'enquête informatique. Celle-ci se ramène à « l'observation systématique, la théorisation et la détermination des faits » (Gauthier, 2003, p. 16). La recherche documentaire a permis de prendre connaissance des travaux existant en la matière et d'engraisser notre socle analytique. Elle a reposé sur l'examen de tous les documents fournis par les différents acteurs directement impliqués dans l'élaboration et la mise en œuvre de la politique publique de gestion des déchets dans la ville de Yaoundé (documents portant sur les missions, les plans d'action, la structure organisationnelle, le budget, les objectifs, les réalisations etc. et les différents rapports). L'analyse documentaire a également permis de conceptualiser et de compléter les informations recueillies lors des entretiens.

Point général sur le 'monopole' d'HYSACAM dans la gestion technique des déchets dans la ville de Yaoundé : une logique antipodique du marché et de la gouvernance publique

Le « desserrement du verrou de l'Etat » (Le Galès, 1999) au cours des années 1990 au Cameroun –notamment avec l'avènement des plans d'ajustements structurels - a donné lieu à la prédominance d'une logique de marché dans la gestion des affaires publiques de manière générale. Il a permis de passer d'une lecture 'top-down' des politiques publiques et du gouvernement des territoires, à une lecture 'button-up' guidée par le nouveau paradigme de la gouvernance. Certains ont d'ailleurs postulé la thèse d'un affaiblissement de l'Etat (Donzelot & Estèbe, 1994) là où d'autres y voyaient sa transformation, voire sa recombinaison (King & Le Galès, 2011). Tout

compte fait, le marché induit la concurrence et la compétitivité. Il est constitutif de la gouvernance qui elle suppose un élargissement et une diversification du schéma actanciel configurant l'élaboration et la mise en œuvre des politiques publiques. En effet, la gouvernance désigne le plus souvent « les formes contemporaines de régulation collective qui se développent sur la base de relations entre acteurs publics et privé, et dans des cadres institutionnels et territoriaux pluriels, plus ouverts et plus instables. On parle ainsi souvent de « gouvernance multi niveaux » pour signifier à quel point les problèmes publics sont de plus en plus traités par des acteurs divers, placés à différents échelons territoriaux » (Nay et al., 2004, p. 230). Contrairement à la notion de gouvernement qui laisse apparaître l'idée d'un pouvoir centralisé et monopolisé par l'Etat dans un cadre national, la gouvernance suppose une prise en compte d'une pluralité d'acteurs agissant collégialement dans les processus d'élaboration, de prise de décision et de même de mise en œuvre. La présente réflexion s'efforce de mettre en relief HYSACAM en tant qu'instrument d'action publique, le public (les populations de la ville de Yaoundé) et la salubrité urbaine.

En effet, la gestion des déchets dans la ville de Yaoundé commence dès les années 1960, et jusqu'en 1968, la ville ne dispose qu'une section d'enlèvement des ordures ménagères qui ne s'occupera que d'un linéaire d'environ 100 kilomètres. Ladite section sera constituée de 36 employés et disposera que de trois véhicules. La décharge est encore située dans un quartier de la ville appelé Oyomabang, soit à environ trois kilomètres du centre-ville (Bessala Ngoma, 2003). Une bonne quantité de déchets est déversée dans les brousses, les bordures de routes, les alentours des habitations. En partie, cette situation s'explique par le fait que la ville était encore modeste, moins dense et peuplée qu'aujourd'hui. Très rapidement, la ville va se moderniser avec une plus grande industrialisation et s'agrandir démographiquement. La quantité des déchets produits par jour va considérablement augmenter. Le problème lié à la gestion des déchets va se poser avec une plus grande acuité, contraignant les autorités publiques à se tourner vers de partenaires techniques spécialisés en la matière. Ainsi, de 1968 à 1993, la Communauté urbaine de Yaoundé va concéder la gestion des déchets à la société Hygiène et Salubrité du Cameroun (HYSACAM) pour un contrat de trois ans qui sera renouvelé à chaque fois. Au cours de ces années, le service d'HYSACAM ne bénéficiera qu'au centre-ville et aux grands axes de la ville de Yaoundé. Les « sous-quartiers » ne sont quasiment pas desservis. A l'intérieur de ces derniers, les habitants créent incessamment des dépotoirs de déchets, en l'absence des bacs à ordures. D'après les estimations, « la quantité d'ordures ménagères collectée quotidiennement par HYSACAM varie entre 400 et 500 tonnes ; soit une moyenne d'environ 40% de la production seulement » (Environnement Recherche Action au Cameroun, 2015, p. 10).

Entre 1992 et 1998, l'Etat va engager un processus de rationalisation de la politique de gestion des déchets dans la ville de Yaoundé en octroyant une concession de plus à une autre société privée d'hygiène : Services Camerounais d'Assainissement (SECA). C'est une société anonyme de droit camerounais exerçant sur toute l'étendue du territoire. Il a pour mission principale de desservir le secteur industriel. Nombre de personnes rencontrées estiment que le contrat concédé au SECA avait une visée beaucoup plus politique que sociale. Il intervient à une période où le Cameroun s'apprêtait à organiser ses premières élections présidentielles pluralistes. L'insalubrité dans la ville faisant partie des préoccupations quotidiennes des populations de Yaoundé, le Président prit l'initiative de signer un contrat de 850 millions de FCFA avec le SECA le 03 janvier 1992 pour l'enlèvement de 68000 tonnes d'ordures. Les données collectées font état de ce que le SECA disposait de 250 employés, onze (11) camions à compaction, six (06) multi-bennes, trois (03) ampliroll, trois (03) grues, vingt (20) coffres de 16m³, 100 coffres de 6m³ et 100 conteneurs de 1m³ (Ngambi, 2015, p. 62). De plus, le SECA bénéficiait d'un appui de 60 camions de 10 tonnes d'HYSACAM en provenance de Douala (Ibid., p. 63). Le contrat du SECA arrive à son terme en juillet 1992 avec des factures impayées. Cette rupture va pousser les différentes Communes de Yaoundé à reprendre la gestion des déchets. Un autre contrat sera négocié et signé en 1993 avec la société privée Dragages-Cameroun qui sera aussitôt (à la fin de la même année) rompu pour manque de moyens financiers (Ibid., p. 65). Le départ de Dragages-Cameroun ouvre la porte à un retour de la société privée CAMECAM qui fera elle aussi long feu pour faute d'expérience technique, d'équipements techniques et de manque de personnel qualifié. Ces lacunes techniques et opérationnelles vont contraindre la société à mettre fin à ses services dès la fin de la même année. A nouveau, l'insalubrité sévit dans la ville. On peut le voir, au lieu de procéder à une multiplication des partenaires techniques, les autorités se sont contentées de les succéder sans pour autant les multiplier et les faire co-agir. Une co-action de plusieurs partenaires techniques aurait concouru à rendre la politique de gestion des déchets dans la ville de Yaoundé plus efficace.

Il y'a donc un rebondissement irréversible d'HYSACAM qui se fait observé. La politique de gestion des déchets dans la ville de Yaoundé s'inscrit dans un schéma de débrouillardise et de tâtonnement permanent, se caractérisant par des va-et-vient et des essais-recommencements infinis. On dirait que les autorités politiques sont en carence de partenaires techniques avec lesquels elles peuvent collaborer. Elles évoquent comme principale raison de cette débrouillardise, le déficit des moyens financiers. Le financement octroyé au gouvernement camerounais par la Banque Mondiale pour assainir la ville de Yaoundé en 1994 permettra la mise sur pied du Programme Social d'Urgence (PSU). Le PSU regroupera des ONG, des

Associations de quartier et des Groupements d'initiative commune (GIC) dont l'expérience et les compétences en matière de gestion des déchets seront très limitée. En 1997, c'est-à-dire trois ans plus tard, le PSU va fermer ses portes. Sa fermeture n'induit pas la fin des activités des ONG, GIC et Associations qui collaboraient avec lui. Ceux-ci vont poursuivre leurs missions ramassage et recyclage des déchets, même si faisant face à des contraintes matérielles et financières.

Cette situation va à nouveau pousser les autorités publiques à signer un contrat de concession avec HYSACAM, lequel contrat court depuis 1998. Ce retour vers HYSACAM est une preuve que les autorités de la Communauté urbaine de Yaoundé n'ont pas pu trouver une solution adéquate au problème d'insalubrité dans la ville de Yaoundé malgré la volonté et les multiples tentatives d'amélioration et/ou de rationalisation. Au départ, le contrat avec HYSACAM est de trois ans renouvelable. A cet effet, il a été renouvelé trois fois. Après les 9 ans d'activités, HYSACAM va signer avec la Communauté urbaine, un autre contrat d'un an (Ngnikam, 2013). Une fois que le contrat d'un an est arrivé à son terme (en 2007), la durée des contrats est passée de trois ans à cinq ans renouvelables. Cette prorogation des contrats est un indicateur de ce que les autorités publiques semblent se contenter du travail abattu par HYSACAM ; c'est par ailleurs un signe de l'évolution de degré de confiance qu'elles lui font. L'exclusivité du contrat de prestation accordée à HYSACAM « empêche d'emblée les autres acteurs de la société civile d'être impliqués dans les projets de gestion linéaire des déchets » (Ngambi, p. 125). Les autorités publiques brandissent l'argument de l'expérience et des compétences techniques du partenaire pour justifier son monopole dans toute la ville. L'échec des autres partenaires privés avec lesquels les autorités ont tenté d'opérer et de démonopoliser le marché au cours des années antérieures les conforte encore dans cette logique d'inchangeabilité. Une telle situation ne peut créer qu' « une condition de dépendance des pouvoirs publics vis-à-vis d'interlocuteurs qui disposent de disponibilités foncières et financières pour implanter des équipements de traitement. Différents contextes nationaux ont montré comment des acteurs privés ont constitué une situation de monopole de la gestion des déchets, notamment par une maîtrise du territoire et se sont imposés comme des interlocuteurs incontournables des autorités locales » (Maccaglia & Cirelli, 2019, p. 2), et c'est le cas d'HYSACAM à Yaoundé.

La politique de gestion des déchets dans la ville de Yaoundé : une politique incrémentale et rationnellement limitée aux déterminants et effets pluriels

La politique incrémentale repose sur un système de décision dont le but est de modifier la situation sociale donnée de manière graduelle, « en ne considérant qu'un nombre limité, et donc non exhaustif, d'alternatives

décisionnelles » (Bérard, 2011, p. 6). Les résultats issus de l'observation et des entretiens menés donnent à voir que la démarche adoptée par les autorités publiques dans la gestion des déchets est incrémentale et peut s'expliquer tant par des jeux et enjeux politiques que par les effets d'une rationalité limitée. Une politique incrémentale c'est une politique dont les objectifs ne sont pas suffisamment atteints ; c'est une politique dont les effets produits restent insatisfaisants pour le public cible. Les populations ne sont pas satisfaites de l'état actuel de la ville. HYSACAM ne pouvant pas desservir tous les coins de la ville, des populations ont elles-mêmes développé des moyens divers pour se débarrasser des déchets : le dépôt des ordures dans les rigoles, les égouts, les caniveaux, les lacs, l'entassement sur les chaussées, l'incinération à ciel ouvert. Ces pratiques sont devenues au sens de Bemb (2009), de véritables dangers dans la plupart des villes africaines comme est le cas de Yaoundé.

Les déterminants de cet incrémentalisme sont multiples et variés. Il s'agit entre autres du retrait financier de l'Etat (les subventions), de la défaillance du dispositif matériel des différentes communes d'arrondissement et des lacunes du cadre règlementaire local de la gestion des déchets ménagers (Ngambi, 2011). De plus, il convient de noter la faible prise en compte de la dimension psychosociologique des populations par la politique de gestion des déchets dans la ville de Yaoundé. En effet, Yaoundé est une ville cosmopolite constituée des populations venant de tous bords. Les villes africaines en générale ne se sont pas construites en rupture avec les mentalités villageoises. L'exode rural a provoqué un *boom* démographique des populations villageoises dans les villes. Les mentalités sont transposées des villages pour les villes. L'arrière des habitations s'érige sans gêne en dépotoir de déchets. Si dans les campagnes cela est vivable, en ville, l'arrière d'une habitation est la devanture d'une autre habitation. Dès lors, l'habitude qui vise à transformer le derrière de sa maison en dépotoir d'ordure ne saurait être vivable en ville. Ajouté à tout ceci, l'absence d'une réelle planification urbaine.

Dans les sous quartiers et/ou les quartiers desservis, les populations s'organisent à gérer elles-mêmes leurs déchets en mettant sur pieds des dispositifs des pré-collecte (Chalot, 1991). Une fois les déchets pré-collectés, ils sont ramassés par des individus qui en ont fait leur gagne-pain quotidien. Dans les quartiers comme Bonas, Ecole des postes, Obili, nous avons recensé deux catégories de ramasseurs : ceux qui disposent des brouettes ou 'poussepousses' et qui ont une période bien déterminée de leur passage dans les cités (une à deux fois par semaines), pour une paie dont la somme varie entre 2 000 et 3000 CFA par mois, et ceux qui, généralement sillonnent dans les quartiers, en faisant le porte-à-porte à l'effet de vider directement les poubelles encombrantes au prix de 50-100 FCFA. Cette dernière catégorie est constituée d'enfants et d'adolescents dont la tranche d'âge varie entre 10 et 14 ans. Dans l'ensemble, leur rôle est d'emballer les déchets dans des vieux sacs

et de les transporter jusqu'au niveau des bacs à ordures. Toutefois, il est à déplorer le fait que le plus souvent, ces agents pré-collecteurs reversent les ordures dans la rue ou aux bordures de la route plutôt que les évacuer dans les bacs à ordures ou les centres de groupages (Yao –Kouassi & Gohourou, 2018). En effet, les enfants engagés comme pré-collecteurs transportent ces déchets vers ces lieux de dépôts n'ont pas suffisamment de taille et de force pour les jeter à l'intérieur du bac à ordures.

D'après une étude réalisée par Pélagie Yolande Epoh-Mvaboum et Isaac Moussinga (2019), près de 40% de la population de Yaoundé n'ont pas accès au service de collecte de déchets fourni par HYSACAM. Ces populations n'hésitent ainsi pas à se servir des espaces inhabités les plus proches de leurs concessions pour en faire des dépotoirs de déchets. Cette pratique a des conséquences énormes tant sur l'environnement que sur la santé des populations qui y vivent. Les cours d'eau qui traversent la ville sont pollués, l'invasion des moustiques et autres insectes vecteurs de nombreuses maladies se fait observer. En contexte d'Afrique subsaharienne en générale, il s'agit des maladies telles que le paludisme comme souligné plus haut, des Infection Respiratoire Aigüe (IRA) et la diarrhée. Ces maladies représentent d'ailleurs 60% des impacts connus de l'environnement sur la santé en Afrique (Koné-Bodou et al, 2020). L'incinération des déchets pratiquée par les populations est porteuse d'émission des gaz à effet de serre ayant un impact direct sur la couche d'ozone. Les déchets déversés dans les caniveaux et les cours d'eau les bouchent et engendre des inondations et des éboulements dans les quartiers situés dans les bas-fonds. En réalité, la pratique devenue courante dans la ville de Yaoundé de décharge hasardeuse des déchets provoque, non seulement des nuisances générées (odeurs, fumées, plastiques volants), mais aussi la pollution des sols et des eaux de la nappe phréatique (Biaou et al., 2019, p. 96). En effet, certains de ces déchets –même si parfois riches en matière organique – produisent des éléments indésirables pour la santé et la sécurité des populations. Or, un Etat qui se veut soucieux de la santé de ses populations c'est un Etat qui s'investit dans la prévention des écosystèmes dans lesquels vivent ces populations. En effet, il existe, à ne point nier, une corrélation entre la mauvaise gestion des déchets et la prévalence de certaines maladies. La ville de Yaoundé s'est souvent illustrée par son insalubrité (déchets déversés sur les bordures de routes, les eaux usées non canalisées, les voiries dégradées, l'insuffisance d'égouts, pollution d'air, etc.). Au cours des années 1994, les immondices non ramassées sont devenues un véritable cauchemar pour les habitants de la ville avec l'arrêt du ramassage des déchets (Ngambi, 2015 ; Gapyisi, 1989). La ville sera différemment qualifiée par des médias de : « Yaoundé, ville poubelle » ; « Yaoundé l'agonie » ; « Yaoundé-la-sale » ; « Yaoundé l'affreuse » (Zoa, 1996), et ce phénomène est encore

clairement visible dans la ville aujourd'hui. La photo ci-dessous en dit d'ailleurs long.



Photo 2. Exemple d'un dépotoir de déchets ménagers en pleine incinération et bouchant les caniveaux initié par les populations du quartier estudiantin Bonas.

Source : (notre étude, 2020)

La gestion disproportionnelle des déchets par HYSACAM crée des frustrations et des sentiments d'inégalités chez les populations ne bénéficiant pas de ses services. En effet, le ressenti des populations de Yaoundé que nous avons enquêtées par rapport à la gestion des déchets varie en fonction de leur milieu d'habitation. La perception et la réception en dépendent également. Toutefois, 59 % estiment insatisfaisants les services offerts par HYSACAM. Aussi convient-il de souligner que même dans les quartiers considérés comme étant des quartiers de résidence (Odza, Bastos) des populations se plaignent de la faible capacité d'HYSACAM à y mettre de la propreté. Les enjeux poussent peut-être à s'interroger sur l'état actuel de la gestion centralisée des déchets dans un contexte de décentralisation croissante au Cameroun qui pourtant tente d'attribuer un rôle important aux autorités locales élues (maires, maires de villes et présidents de conseil régional) et demande à mettre désormais les citoyens ordinaires au centre de leurs propres préoccupations de développement individuel et/ou collectif.

Réinventer et ajuster la politique de gestion des déchets dans la ville de Yaoundé : le rôle de la gouvernance décentralisée.

S'il est vrai que les questions d'hygiène et d'assainissement constituent des préoccupations anciennes, force est de reconnaître que leur intérêt a connu un relief ces dernières années. Cette évolution est notamment tributaire des mutations du cadre législatif et réglementaire qui organise la prise en charge de ces questions. A ce sujet, la Loi N°96/06 du 16 janvier 1996 portant révision de la constitution du 2 juin 1972 tient un rôle très important. En réaffirmant le caractère décentralisé de l'Etat unitaire du Cameroun, cette loi a doté les collectivités territoriales (la commune et la

région) de pouvoirs particuliers, au nombre desquels figurent la prise en charge des questions d'hygiène et d'assainissement. En plus, la Loi N° 2004/017 du Juillet 2004 d'orientation de la décentralisation stipule que : « La décentralisation constitue l'axe fondamental de promotion du développement, de la démocratie et de la bonne gouvernance au niveau local » (Article 2 alinéa 2).

En ce qui concerne l'hygiène, l'Etat a mis sur pied des dispositions et des lois régissant l'activité. Tout d'abord dans la Loi N° 2004/018 du 22 juillet 2004 fixant les règles applicables aux communes, certaines dispositions donnent compétence aux communes. L'article 16 par exemple transfère aux communes la compétence de nettoyer les rues, chemins et espaces publics communaux ; d'assurer le suivi et le contrôle de la gestion des déchets industriels ; de lutter contre l'insalubrité, les pollutions et les nuisances ; d'élaborer les plans communaux d'action pour l'environnement et de gérer au niveau local des ordures ménagères. S'agissant de l'environnement, l'Etat a pris des mesures nécessaires pour sa protection. Dans les articles 1 et 2 du Décret N°2012/0882/PM du 27 mars 2012 fixant les modalités d'exercice de certaines compétences transférées par l'Etat aux communes en matière d'environnement, il est assigné aux communes la tâche d'Élaborer des plans d'action pour l'environnement et de lutter contre l'insalubrité, les pollutions et les nuisances (article 1). De plus, il revient aux élus locaux d'élaborer et de mettre en œuvre la politique nationale en matière d'environnement et de développement durable (article 2).

De l'analyse des différentes dispositions normatives sus énoncées, il ressort clairement que l'élan actuel du processus de décentralisation au Cameroun donne à s'interroger sur la raison d'être de la monopolisation centralisée de HYSACAM dans la gestion technique des déchets dans la ville de Yaoundé. Un secteur dont les compétences et les ressources sont largement dévolues aux organes locaux (maires, conseillers municipaux, maire de ville, conseillers régionaux, si l'on s'en tient aux dispositions des instruments relatifs à la gouvernance locale et à la décentralisation. Par conséquent, il semble que toute solution à la gestion monopolisée des déchets dans la ville de Yaoundé et aux conséquences y afférentes réside dans le développement des politiques et des stratégies de décentralisation qui donneront aux maires des sept communes de Yaoundé la capacité financière, administrative et technique et assez d'autonomie pour gérer efficacement les déchets dans la ville, en collaboration avec les organisations de la société civile (ONG, CIG, etc.), le secteur privé et la population locale en tant que partenaires actifs. Il sera également nécessaire, dans le cadre de la mise en œuvre de la décentralisation actuelle, d'accorder une attention particulière à la coopération décentralisée.

En claire, les autorité politiques locales doivent non seulement s'imprégner des compétences et des ressources qui leur sont transférées en matière de gestion des déchets, mais aussi, procéder à un décentrement, mieux, à une libéralisation des processus décisionnels y afférents. Il s'agit d'expérimenter un logiciel managérial qui encourage le marché, c'est-à-dire la collaboration, la coopération, le partenariat et la contractualisation. Cela suppose également une diversification des partenaires et donc, une démonopolisation de la gestion technique des déchets dans la ville de Yaoundé qui n'a jusqu'ici pas permis l'assainissement et l'urbanisation souhaitée dans ladite ville.

Conclusion

Jusqu'ici, le but de cet article a été de passer en revue, de manière critique, les politiques publiques de gestion des déchets au Cameroun en mettant l'accent sur le rôle monopolistique d'HYSACAM dans la ville de Yaoundé. Par ailleurs, l'intérêt a été porté sur les possibilités d'ajustement de ces politiques, ce qui a donné lieu à une réflexion sur des perspectives fondées sur des preuves que le gouvernement pourra mettre à profit afin d'améliorer ses politiques publiques de gestion des déchets. Cela devra passer, l'avons-nous martelé, par l'adoption d'une démarche qui s'inscrit dans le paradigme managérial de gouvernance décentralisée et de partenariat. La réflexion arrive donc à la conclusion que le monopole de gestion technique des déchets octroyé à HYSACAM n'est pas de nature à favoriser une gestion efficace des déchets dans la ville de Yaoundé car, les problèmes d'insalubrité et de pollution y demeurent avec une plus grande acuité. Cela induit un cadre de vie souillé par des odeurs nauséabondes, des maladies et la présence remarquable de moustiques, insectes, rats et mouches.

Dans une perspective plus large, il est essentiel de souligner que, bien que l'analyse connaisse certaines limites par rapport aux données (par exemple, la portée de l'étude se concentrant uniquement sur Yaoundé et l'utilisation limitée d'enquêtes qualitatives en raison de facteurs financiers, temporels et humains, contraintes de ressources), elle a néanmoins produit des enseignements utiles à la gestion des déchets dans la ville de Yaoundé. Les diagnostics qu'elle pose pourront servir à améliorer la gestion des déchets dans d'autres villes métropolitaines comme Douala (la capitale économique), qui sont tout aussi soumises aux contraintes structurelles et opérationnelles liées à la gestion des déchets et où HYSACAM détient le monopole. À plusieurs égards, cet article a également fourni une plate-forme pour les recherches futures de cette catégorie dans des contextes aussi complexes que celui du Cameroun avec cependant peu de recherches empiriques réalisées et en cours [de réalisation] sur la forte monopolisation de la gestion technique des déchets à l'ère de la décentralisation. Pour la raison que les autorités politiques locales

élues opèrent dans un environnement polycentrique composé de multiples lignes de revendications des responsabilités hiérarchiques et où le gouvernement local fort et la citoyenneté active doivent cohabiter et trouver leur chemin dans le processus de décentralisation du Cameroun, cette étude sera judicieux pour les recherches futures sur la question. Elle leur permettra d'examiner les circonstances dans lesquelles la gouvernance locale polycentrique est construite et quels espaces s'ouvrent au renforcement de l'administration locale et de la citoyenneté démocratique dans la conception des politiques publiques en général (Arrey, 2011), et les processus de mise en œuvre des politiques de gestion des déchets en particulier.

Toutefois, il faut reconnaître les difficultés auxquelles les autorités pourraient faire face dans l'opérationnalisation des recommandations sus évoquées. Ces obstacles se résument pour l'essentiel aux difficultés financières (diversifier les partenaires techniques exige de disposer assez de ressources financières et cela s'avère périlleux pour les collectivités locales en contexte de non effectivité du transfert des ressources) et aux difficultés liées à l'indisponibilité des partenaires techniques qualifiés. Les tentatives de démonopolisation foirées survenues dans les années 1993 en disent long à propos. Les autorités devront donc sélectionner avec beaucoup de précautions les futurs nouveaux partenaires techniques.

References:

1. Arrey, W.H. (2011). Decentralisation as a Mechanism for Deepening Democracy in Contemporary Africa: An Investigation of the Case of Cameroon. Unpublished Ph.D Thesis. University of Bradford, U.K.
2. Bemb, C.G. (2009). Le traitement des ordures ménagères et l'agriculture urbaine et périurbaine dans la ville de Bertoua. Mémoire de master en Conseil général. Institut National de la Jeunesse et des Sports (INJS), Yaoundé.
3. Bérard, C. (2011). La démarche décisionnelle dans les systèmes complexes : incrémentalisme et rationalités. AIMS, Nantes, 1-24.
4. Bessala Ngoma, (2003). Collectivités locales et gestion déléguée des déchets : cas de Yaoundé au Cameroun. Yaoundé, Hysacam.
5. Bjørn Olsen, H. (2017). Décentralisation et gouvernance locale. Module 1: définitions et concepts », novembre 2017.
6. Blundo, G. (2009). Des ordures et des hommes : la gouvernance de l'assainissement à Dogondoutchi. In Tidjani Alou (Dir.). Les pouvoirs locaux au Niger. Tome I (pp. 113-127). Paris : Codesria-Karthala.
7. Biauou, I. C., Hedible, S. C., Codjo Landeou, R., & Boko, M. (2019). Impact des Décharges Sauvages des Déchets Solides sur les Sols à Cotonou. European Scientific Journal. 15(30), 94-104.

8. Chalot, F. (2004). De l'amont vers l'aval : l'émergence d'une filière de gestion des déchets adaptés aux villes africaines. Synthèse et analyse des actions relatives aux déchets. Gestion durable des déchets et l'assainissement urbain.
9. Drucker P. (1969). The age of Discontinuity. Guidelines to our changing society. New York: Harper and Row.
10. Environnement Recherche Action au Cameroun. (2002). Rapport final : Mise en place de structures de précollecte et de traitement des déchets solides urbains dans une capitale tropicale : cas de Yaoundé, Cameroun. Programme gestion durable des déchets et de l'assainissement urbain. Disponible sur : https://www.pseau.org/epa/gdda/Actions/Action_D05/Rapport_final_D05.pdf.
11. Epoh-Mvaboum Y., & Moussinga, I. N. (2019). La gestion des ordures ménagères et leur impact sur l'environnement : cas de la ville de Yaoundé. Consulté le 02 décembre 2020, sur https://www.sifee.org/static/uploaded/Files/ressources/actes-des-colloques/ouagadougou/session-6/2_Moussinga_communication.pdf.
12. Foucault, M. (1976). Il faut défendre la société. Cours au Collège France 1976. Paris : Gallimard/Seuil.
13. Foucault, M. (1997). Surveiller et punir. Naissance de la prison. Paris : Gallimard, « Bibliothèque des histoires ».
14. Freund, J. (1986). L'essence du politique. Paris : Dalloz.
15. Gapyisi, E. (1989). Le défi urbain en Afrique. Paris : Harmattan.
16. Hirst, P. (2000). Democracy and Governance. In J. Pierre (Eds.). Debating Governance (pp. 13–35), Oxford: Oxford University Press.
17. Jönsson, A. (2010). Incrémentalisme. In L. Boussaguet (Eds.). Dictionnaire des politiques publiques: 3e édition actualisée et augmentée (pp. 317-325). Paris : Presses de Sciences Po
18. King, D., & Le Galès P. (2011). Sociologie de l'État en recomposition. Revue française de sociologie. 52 (3), 453-480.
19. Koné-Bodou, P. J., Ballo Zié, Kouadio, A. S., Kouamé Kouamé, V., Yapi Dopé, A. C., & Tidou Abiba S. (2020). Fardeau économique du paludisme et pratiques de gestion des ordures ménagères : cas des Communes de Cocody, Anyama, Port-Bouët, Et Yopougon (Abidjan, Côte d'Ivoire). European Scientific Journal. 16 (6), 152-167.
20. Le Galès, P. (1999). Le desserrement du verrou de l'État ? Revue internationale de politique comparée, 6 (3), 627-642.
21. Lindblom, C.E. (1979). Still muddling, not yet through. Public Administration Review, 39 (6), 517-526.
22. Maccaglia, F. et Cirelli, C. (2019). « Penser le politique par les déchets », Géocarrefour [En ligne], Numéros à venir, mis en ligne le

- 05 juillet 2019, consulté le 17 novembre 2020. URL : <http://journals.openedition.org/geocarrefour/12663>
23. Machikou, N. (2010). Les chemins d'un Etat observateur. Contribution des observatoires régionaux de santé. Thèse de doctorat en Science politique. Université de Picardie Jules Verné.
 24. Matejka, G., Bouvet, Y., Evens, E., Koulidiati. J., Ngnikam, E., & Tanawa, E. (2014). Gestion Maîtrisée des déchets solides urbains et de l'assainissement dans les pays en voie de développement, les besoins en études scientifiques et techniques spécifiques et en outils méthodologiques adaptés. Colloque du développement durable à Ouagadougou, Burkina Faso. Disponible en ligne sur: http://www.francophonie.unilim.fr/public/publications/download/Oua_gaauwfren.pdf.
 25. Nay, O. (2008). Lexique de science politique. Vie et institutions politiques. Paris : Dalloz.
 26. Ngambi, J.R. (2015). Déchets solides ménagers de la ville de Yaoundé (Cameroun): de la gestion linéaire vers une économie circulaire. Thèse de doctorat en Géographie, Maine : Université du Maine.
 27. Ngambi, J.R., Tchindjang, M., & Ndjogui, T. E. (2011). La prolifération des décharges sauvages et leurs impacts socioenvironnementaux dans la ville de Yaoundé. *International Journal Advanced Studies and Research in Africa*, 2(1), 52-68. Disponible sur : <http://www.africascience.org/>.
 28. Ngikam E. (2013). Etat de lieu de la gestion des déchets au Cameroun : cas de Yaoundé. Atelier de Lomé du 23 au 29 septembre 2013, Lomé.
 29. Obe, H-M., & Brou Ahossi, N. (2019). Impacts de la Décharge Publique d'Akouédo sur le Cadre de Vie et la Santé de la Population Riveraine. *European Scientific Journal*, 15(12), 20-29.
 30. Ortar, N., & Anstett, E. (2017). Jeux de pouvoir dans nos poubelles. Economies morales et politiques du recyclage au tournant du XXI^e siècle. Paris : Petra.
 31. Sidi Ould, S. (2006). Méthodologie de caractérisation des déchets solides ménagers à Nouackchott (Mauritanie) : Contribution à la gestion des déchets et outils d'aide à la décision. Thèse de Doctorat, Limoges : Université de Limoges.
 32. Simon, H.A. (1945). *Administrative behavior. A study of decision-making processes*. New York: The Free Press.
 33. Yao-Kouassi, Q.C., & Gohourou, F. (2018). L'influence de la pré-collecte des ordures ménagères sur la qualité de la salubrité dans le District d'Abidjan (Côte-d'Ivoire). *Déchets Sciences et Techniques*. INSA de Lyon, 3-10.

34. Zittoun, P. (2013). Conclusion / Comment les politiques publiques fabriquent la politique. In P. Zittoun, La fabrique politique des politiques publiques: Une approche pragmatique de l'action publique (pp. 321-328). Paris: Presses de Sciences Po.
35. Zoa, A. S. (1995). Les ordures à Yaoundé. Urbanisation, environnement et politique au Cameroun. Paris : l'Harmattan.

Documents officiels consultés :

1. Constitution du Cameroun du 16 Janvier 1996 ;
2. Loi n° 2004/017 du 22 juillet 2004 portant orientation de la décentralisation au Cameroun ;
3. Loi n° 2004/018 du 22 juillet 2004 portant règles applicables aux communes ;
4. Loi n°2004/019 du 22 juillet 2004 portant règles applicables aux régions ;
5. Republic of Cameroon: *Compendium of Laws on Decentralisation*. Produced jointly by MINATD and French Embassy in Cameroon, Service of Cooperation and Cultural Actions.



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The Influence of Digital Financial Services on the Financial Performance of Commercial Banks in Cameroon

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Abstract

A strong banking industry is important in every nation and this can have a significant effect in supporting economic development through the provision of efficient financial services. Digital banking/financial services is the act of carrying out financial transactions without the use of physical cash, coins or bills. This paper sort to determine the influence of digital financial services on the financial performance of commercial banks in Cameroon. Specifically, it examined the influence of Digital Savings Services, Digital Transfers Services, Digital Withdrawals Services and Digital Payment Services on the profitability of commercial banks in Cameroon. It covers 10 out of 15 commercial banks in Cameroon. Methodologically, it made use of survey research design. Item by item analysis of the questions was used to identify the reliability of digital financial services. The Taylor linearise variance estimation technique was used to determine their influence on

commercial bank profitability. Results from the study showed that digital saving services, digital withdrawal services and digital transfer services have a positive and significant influence on the profitability of commercial banks in Cameroon. Digital payment on the other hand had a negative but significant influence on commercial Bank's Profitability at 10% level of significance. Generally, 48% of variations of profitability of commercial banks are caused by joint variations in the use of digital transfer services, Digital Savings services, Digital Withdrawal services and Digital Payment services. Consequently 0.52 or 52% of the variations in profitability are not accounted for by the study's model on digital financial services and bank profitability but caused by the error term. Conclusively, digital financial services are a booster of commercial bank's profit levels. Finally, the study recommended that management of banks and policy makers in the banking industry should go in for robust digital systems and services as a means to diversify their sources of income and meet up with declining profit levels.

Keywords: Digital Financial Services, Bank Profitability, Commercial Banks, Cameroon

Introduction

The need for every business is to be effective and efficient while profitably rendering services to their customers. As a result, the implications of Information and communication Technology (ICT) adoption and use for the global financial system have been fundamental. ICT has not only transformed transaction processes of rendering banking services but is also associated with shifting organisational boundaries, facilitating the creation of new financial products, changing the nature of work, globalising financial markets and restructuring the character of financial intermediation (Scott, Reenen and Zachariadis, 2017). With the emergence of consumer rights and rapid technological advancements in the 1960s, there was a significant shift in both retail and corporate banking. As a result of the dominant influence of customers, most of these processes now are being done electronically or via the bank's official website with complex algorithms, also known as Digitalisation or digital financial services giving rise to new customer preferences which banks must meet.

Information Technology opportunities and the landscape in rules and regulations are fast changing. Just a few months ago (as at the time of writing), a local bank in Iceland made the loan application process check possible in just three (3) minutes for individuals through the bank's mobile application. Before, the same process took the customer about ten days to complete. With this process, the bank has eliminated all physical contacts between bank officials and the customers, enabling the customer to request

for the application at their convenience. Barry (2018) pointed out that, due to mobile banking services, the normal time for savings has reduced by 30% while that of withdrawals has reduced by 70%. Most recent projections estimate that around 30% to 40% of all current service-related processes will be replaced with a digitalised workforce (Lamberton and Stephen, 2016). According to Porkelsson (2017) this shows that the need for human interference is getting less important and the use of automated processes, whether it's with artificial intelligence or other robotic automation, is rapidly taking over. Ayuketang (2018) noted that digital financial services have led to a situation in which information, communication and commerce are no longer limited by time and Geographical space.

By definition, digital financial service is the provision of a broad range of financial services that can be accessed and delivered through digital channels in order to execute financial transactions such as payments, savings, remittances and insurance (Kambale, nd). Today, Africa is home to more digital financial service deployments than any other region in the world. Ten years after the breakthrough of digital financial services in Sub-Saharan Africa, there is evidence of this, with about half of nearly 700 million individual users worldwide (LeHouerou, 2018). In the African continent, the digital financial service impacts on the financial sector can easily be linked to the amount of people using internet banking for settling their bills because it is the main factor for the average people in the banking errands (Pohjola 2015 as cited in Mueni, 2017).

The financial system in the Economic Community of Central African States (CEMAC) is bank dominated and mostly foreign owned. Cameroon and Gabon, the two largest economic powers in the sub-region, account for about three fourths (3/4) of total assets and loans (Saab and Vacher, 2007). At the end of the seminar on how to achieve financial inclusion and digital transformation of the banking and financial services sector in Cameroon profitably, Limunga (2019) recommended that it appears imperative for banks in Cameroon to go digital, as 60% of Cameroonians are unbanked, while about 9.5 million of them have already adopted mobile finance. This study examines the influence of Digital Savings Services, Digital Transfers Services, Digital Withdrawals Services and Digital Payment Services on the profitability of commercial banks in Cameroon.

Statement of Problem

The end of the great depression of 2007 has forced the banking industry to begin a process of fostering changes. Novel Business models based on technological advancements are challenging the existence of a long established and traditional industry (Ketterer, 2017). Perpetual vision engineered by performance orientation is a mandatory element for all

businesses that operate for profit motives. Competition in the banking sector is toughening as days go by and without the introduction of new technologies into service mechanisms, even the strongest banks with a conservative strategy will lose a significant part of their customers and consequently their profit levels will shrink. As such digital financial services have become a major topic for banks all over the world. Belous and Lyalkov (2017) as cited in Galazova and Magnomaeva (2019) noted that by 2020 more than 20% of businesses in the financial service industry will be at risk due to the impact of the Financial Technology (FinTech) segment. This is because the traditional banking system has not been able to solve the modern day problem of low profit levels of commercial banks eroded by the stiff competition coming especially from the telecommunication industry. Lately, financial institutions have identified sustainability to be an important part of their projects which implies sustainable banking is a strong response to financial slumps. A change from traditional deposit taking and lending towards investments based on revenues from fee and commission services may be the answer to this challenge as commercial banks profit levels sink. Given the presence of many other non banking financial institutions rendering similar banking services, the amount of profits commercial banks made in the yesteryears have been reduced drastically by these institutions. This is due to the inability of the traditional banking system to make sufficient profit so as to withstand the prevailing competition. This is an indication that the traditional banking activities may no longer permit commercial banks to meet up with the unending and sophisticated demands from customers, to make sufficient profit in order to maximize shareholder's wealth, to respect regulatory limit of bank activities and the need to make sufficient profit for sustainability. It is from this backdrop that this study seeks to find out whether the adoption of digital banking services by commercial banks can serve as a solution to improve commercial bank's performance since the traditional banking system has remained dwarf in this aspect.

Statistical Hypotheses

The Statistical Hypotheses that guide the progress of this paper is; Digital Savings Services, Digital Transfers Services, Digital Withdrawals Services and Digital Payment Services have no influence on the profitability of commercial banks in Cameroon.

Literature Review

Empirical Literature

Here, existing Literature relating to digital financial services and the performance of commercial banks have been reviewed. This chapter presents

a review of the most noteworthy contributors of other authors to the research area. The purpose of this review was to make a comparison with similar investigations. Ogare (2013) carried out a study on the effect of electronic banking on the financial performance of commercial banks in Kenya. The objective was to investigate the relationship between e-banking and the performance of commercial banks in Kenya. Electronic banking, the independent variable consisted of Automated Teller Machines (ATMs), Number of debit and credit cards issued to customers, Number of Point of Sales (POS) terminals and the usage of the levels of Mobile Banking, Internet Banking and Electronic Funds Transfers or Digital transfers. The study used secondary data collected from the annual reports of commercial banks and the Central Bank of Kenya from 2008 to 2012. To analyse data, descriptive and inferential statistics were used. Findings from the study shows that Automated Teller Machines (ATMs), Number of debit and credit cards issued to customers, Number of Point of Sales (POS) terminals and the usage of the levels of Mobile Banking, Internet Banking and Electronic Funds or digital transfers have a strong and significant effect on the profitability of commercial banks in the Kenyan banking industry. Thus there exist a positive relationship between e-banking and bank performance.

More so Sana, Mohammad, Hassan & Momina (2011) carried out a study on the impact of e-banking on the profitability of Pakistani Banks. The aim of their paper was to determine if digital funds transfers and Automated Teller Machine (ATMs) play a role on bank's profitability. The research was qualitative and data for the study was gathered by interviewing bank managers of twelve banks across Pakistan. Results from their study show that ATMs and Digital Funds Transfer have increased the profitability of banks by enabling them to meet their costs and earn profit even in the short span of time.

Again, Boateng & Nagaraju (2020) carried out research on the impact of digital banking on the profitability of deposit money banks; evidence from Ghana. The fundamental research objective was to find out the impact of digital banking on the profitability of deposit money banks in Ghana. Secondary data spanning from 2012 to 2018 were collected from the annual payment system report of the Central Bank of Ghana, Cheque Codeline clearing, Ghana Automated Clearing House, Ghana Interbank Settlement, Gh-Link (gh-link is a local electronic payment ecosystem based on the domestic Automated Teller Machines (ATM) card with channels such as ATM, PoS and Web.), E-zwich (E-zwich is the brand name for the National Switch and Smart card payment system) and Mobile Money Payments in value were the independent variables. Return on Assets (ROA) was the dependent variable employed in the study. Partial Least Square (PLS) regression was the statistical tool used for the analysis with the aid of

Origin2018 scientific software. The results of the study indicated that Gh-Link and E-zwich distinguished themselves from the rest of the variables by explaining 95.87% of the variations in the profitability of Ghanaian banks. It was further found that a positive relationship existed between Cheque Codeline Clearing; Ghana Automated Clearing House, Ghana interbank settlement, GH-Link, and the profitability of Ghanaian Banks. Mobile money and E-zwich, on the other hand, had a negative relationship with the profitability of the banks.

Chindudzi *et al.*, (2020) carried out research on the impact of digital banking on the performance of commercial banks in Zimbabwe. The main objective of their study was to investigate the impact of digital banking on the performance of commercial banks in Zimbabwe. Making use of annual secondary data for the period 2013 to 2017 obtained from the bank's annual financial report and publications, four digital banking variables were used. They include; online customer deposits or Digital savings, Online Banking Transactions, Internet Fees and Commissions and Internet Banking Expenditure while Return on Assets (ROA) was used as the measure of financial performance. Panel Data Analysis (the random effect regression model) and the Pearson's Product Moment Correlation analysis were employed as the statistical data analytical tool. The study established that digital banking has contributed positively to the performance of Zimbabwe's commercial bank through increase online deposits or savings and banking transactions. Generally, the study found that electronic banking usage universally and significantly influences the financial performance of commercial banks as measured by ROA.

Wadesango & Magaya (2020) carried out a study on the impact of digital banking services on the performance of commercial banks in Zimbabwe. To accomplish this, the study made an attempt to investigate the effect of digital banking on financial performance of commercial banks in Zimbabwe. Quantitative research methodology was adopted. The target population for the study was one commercial bank. Data collection sheet was used in data collection. Pearson correlation coefficient helped evaluate the effect of digital banking on the banks' financial performance. Inferential test and multiple regression analysis were used to analyse the effects of digital banking on financial performance. The study revealed that ROA in commercial bank in Zimbabwe increased in upwards trends due to an increase in online customer deposits through digital banking platforms. The study established that online bank transaction to total asset ratio increased in an upwards trend over the specified study period. Further increase in Information and Communication Technology (ICT) expenses, fees and commissions to total asset ratio increased.

Again, Takon *et al.*, (2019) in their paper examined the impact of the digital payment system on the efficiency of the Nigerian Banking Sector. The objective of their paper was to examine the contribution of the digital payment system on the efficiency of the banking sector in Nigeria. Quarterly data covering 2009-2018 were generated from the Central Bank of Nigeria (CBN) Statistical Bulletin and World Bank database. They employed the Ordinary Least Square (OLS) regression, after testing for the properties of time series using Augmented Dickey-Fuller (ADF) and Philip-Peron test of stationarity. Engle and Granger test for co-integration were conducted to determine the existence of a long run relationship. The speed of adjustment was determined using the Error Correction Model (ECM). The result of the study shows that digital payments proxied by Automated Teller Machine (ATM) transactions, Point of Sales (POS) transactions, Mobile Payment (MP) transactions and Web Payment (WP) Transactions has negative and significant impact on bank efficiency proxied by bank overhead cost both in the long and short run. The effect of digital payment on total cost as a ratio of income varies according to the variable used to proxy digital payment.

Vekya (2017) study was on the Impact of e-banking on the profitability of commercial banks in Kenya. The study sought to determine the impact of electronic banking on the profitability of commercial banks in Kenya. Methodologically, the study adopted a descriptive research design. The population of the research consisted of the 43 commercial banks in operations as at 31st 2014 in Kenya. A census survey was undertaken. The study used secondary data obtained from various Central Banks of Kenya publications. Statistical Package for Social Sciences (SPSS) was used in the analysis of data. Descriptive statistics produced trends, means and percentages while inferential statistics produced regression and correlation results which showed the causal relationship among the variables. Results from multiple regression indicated that there is a positive significant relationship between ATM transactions (Digital withdrawals) and bank profitability ($p < 0.05 - 0.004$). A unit increase in digital withdrawal leads to an increase in ROE (bank profitability) by 1.662 units.

Furthermore, Kemboi (2018) carried out research on the relationship between Financial Technology and the financial performance of 43 commercial banks in Kenya. The objective of the study was to determine the effect of financial technologies on the financial performance of commercial banks in Kenya. In this study, the independent variables were mobile banking, internet and agency banking. The target population for this study was the 43 banks in Kenya. The study used descriptive statistics analysed using the Statistical Package for Social Science (SPSS) software, multiple regression technique was also used to

study the relationship between financial performance and financial technology. Results from the study shows that adoption of mobile banking, Online or internet banking and agency banking impacted the financial performance measured using return on assets for banks positively.

In addition, Karmal *et al.*, (2017) carried out a study on Electronic Card Usage and their Impact on Bank's Profitability in Jordanian Banks. The Purpose of this study was to know the effect of using the electronic credit cards such as the Number of Electronic Credit Cards, the proportion of Investment in Credit Cards, and the Operational Expenses to the Credit Cards. They explain their effect on the net Income from Credit Cards on bank's profitability by using a return on equity model. The information and data were collected from Annual reports given by the banks and from the credit management of Commercial banks. To analyze the study data and to test its hypothesis, the Statistical Package for Social Science (SPSS) system was used. Moreover, in order to answer the Questions of this study, a simple Regression was used. Their study found out that there is an effect between the numbers of credit cards on banks profitability. Furthermore, there is an effect on the net income from Credit Cards and proportion of investment in Credit Cards. Moreover, there is an effect between operation expenses on Credit Cards and net income from Credit Cards. There is also a positive effect between net income from Credit Cards and profitability (ROE).

Again, Alubisia *et al.*, (2018) carried out a study on the effect of technology based innovation on non interest income of commercial banks in Kenya. The purpose of the study was to identify the impact of technology based financial innovation on non-interest income in Kenyan commercial banks. The study investigated how the adoption of Automated Teller Machines (ATMs) and Cards, Internet and Mobile Banking and use of Funds Transfer Systems such as Gross settlement system (RTGS) and Electronic Funds Transfer (EFT) has impacted the non-interest income of commercial banks in Kenya. Descriptive research design was utilised. The study found that technology based financial innovation has a significant effect on the non interest income earned by commercial banks in Kenya.

Theoretical Literature

In this section, the paper reviewed the most prominent and adopted theory in line with the study's area of interest. The theory reviewed one of the prominent financial innovation theories. Financial innovation theories are based on the tenet that banks carry out innovative financial services due to circumstances surrounding them. In reaction to these harsh circumstances they are pushed to carry out more innovations so as to make more profit and be sustainable. The Updated DeLone and McLean Information System (IS)

Success model was adopted and extended in this paper to reveal the variables of interest.

Updated DeLone and McLean Information System (IS) Success Model

The updated model offers six interrelated constructs of information systems success measures, that is, the quality dimensions (information quality, system quality, and service quality) which could affect subsequent use or intention to use and user satisfaction. It also suggested that some benefits tagged as net benefits will be achieved as a result of use and/or user satisfaction. These net benefits could consequently affect user satisfaction and continued use of the system. Put together, these six constructs are; Information, system, and service quality; use, user satisfaction, and net benefits.

In extending this model, this paper included the outcome of a successful information system for commercial banks. It explains that, if a bank's information system is successful, then the result will be digital withdrawal services, digital saving services, digital payment services and digital transfer services and this will have a net benefit impact on the bank in terms of increased bank profitability. This can be seen from the diagram below;

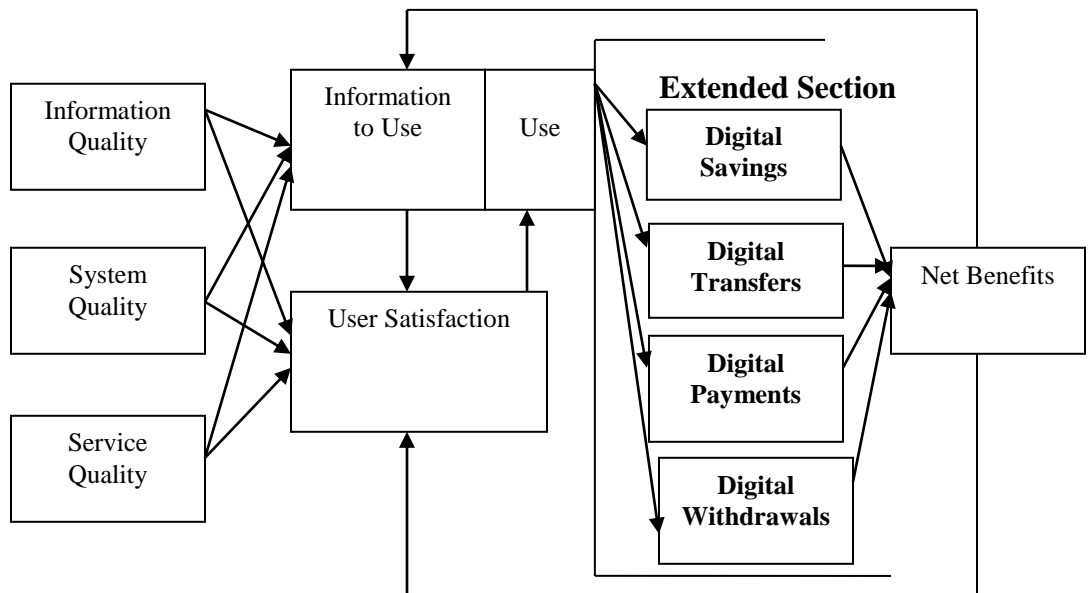


Figure 1. Extended Updated DeLone and McLean IS Success Model
Source: Researchers (2021)

Materials And Methods

Methodological Steps

The main aim of this paper was to determine the influence of digital financial services on the profitability of commercial banks in Cameroon. To test the hypothesis, the following is a list of the methodological steps that were employed;

Step I: Type of research: Quantitative research specifically causal research suitable to establish cause effect relationships among variables.

Step II: Target Population of the study: The study's target population encompassed all employees working in the electronic banking department at the Headquarters of all 15 commercial banks in Cameroon. On average there were 3 staff working in the electronic banking department per bank.

Step III: Sampling Size and Sampling Technique. Questionnaires were administered to 30 bank staff from the 10 commercial banks under study. An average of 3 bank staff was used giving a total of 30 respondents who work in the Head Office of Commercial Banks. The Head office was used because digital banking data is highly centralized for all commercial banks and so reliable information could only be obtained from the Head Quarters of Banks. This paper made use of the non-probability sampling technique specifically purposive sampling. The purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participants possess.

Step IV: Test for reliability and Validity of Research constructs/instruments; an item by item internal consistency test was carried to determine the reliability of the constructs while content validity was used to test for the validity of the constructs under study.

Step V: Administration of questionnaires to bank staff working in the electronic banking department.

Step VI: Data Collection: Data from the questionnaire was recorded and coded in statistical package for social science (SPSS) for analysis to facilitate analysis.

Step VII: Regression Model Used: The model used in this paper was adopted and modified from a similar study by Ngumi (2013).

Step VIII: Method of Data Analysis: Data for this paper was analysed using multiple regression. Regression studies are excellent tools when you need to make predictions and forecast future trends.

Step IX: Estimation Technique: Taylor linearised variance estimation technique was chosen over the ordinary least square technique because it is suitable for complex survey data and a survey data usually does not fulfill some of the assumptions of Ordinary Least Square such as homoscedasticity.

Data Collection

This study adopted a survey research design by issuing questionnaires to specific bank staff particularly those working in the electronic banking department. This study made use of the non-probability sampling technique specifically purposive sampling. The purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses. Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of their knowledge or experience. The idea behind purposive sampling is to concentrate on people with particular characteristics who will better assist with the relevant information (Etikan, Musa & Alkassim, 2016).

As a result, only those who work in the electronic banking department at the Head Office of all commercial banks under study were chosen to respond to the questions in the questionnaire. They were chosen because this department is a technical department of the bank that is able to monitor and record the volume of digital financial transactions in the bank. Again, they are able to use the information for decision making identifying those digital financial services that are mostly used by bank customers (i.e. Digital payments, Digital Savings, Digital Withdrawals and Digital Transfers). They also seek ways of improving their uses. They were also selected because they are in charge of implementing strategic decisions for banks and have higher level of appreciation on how digital financial services influences the performance of their institutions.

In this department, there were 18 Males and 12 Females workers for all the 10 commercial banks under study. This indicates that more men are employed than women in this department. Their ages range between 20 years to 40 years with the majority within the age range of 31-40. Again, 43% of the respondents were holders of First Degree, 40% were Master's Degree holders while 17% held certificates above Master's Degree. As per management levels, 6 of the respondents indicated that they are top level managers, 24 middle level managers while none was a Lower level manager. Out of the 15 commercial banks in Cameroon as at the time of writing this work, 10 were used for the study. They include; NFC Bank, Eco-Bank, SGBC Bank, CCA Bank, Afriland First Bank, UBC Bank, BICEC Bank, UBA Bank, Standard Chartered Bank, and Atlantic Bank. There were three respondents from each bank.

A total of 30 bank staff made up the sample size of this study representing 67% of the total population. All administered questionnaires were collected representing 100% response rate. The choice of primary data was based on the need for originality and the absence of secondary data. The questionnaires were designed using five point Likert scale questions to

capture the constructs of digital financial services. For each of the constructs, a set of five questions were asked. An Item by Item test for reliability was carried out in order to give room for standard scientific analysis after ensuring content validity. The data was collected from the questionnaires using excel spreadsheet to give room for statistical analysis.

The time scope for this study is within a period of five years that spans from 2016 to 2021. The Geographical scope is limited only to Cameroon, specifically commercial banks offering digital financial services. In the light of content scope, the variables used in this study are limited only to transactions carried out using digital financial services such as digital savings, digital withdrawals, Digital Transfers and Digital savings services while performance of commercial banks is limited to financial performance. Theories and concepts reviewed in this study are those related to digital financial services innovation such as the financial innovation theories.

Model of Analysis

The analytical model that was utilized to examine the influence of digital financial services on the financial performance of commercial banks in Cameroon is as follows; an item by item internal consistency test was done to determine the reliability of the constructs. The table below shows a summary of the reliability test for the influence of digital financial services on the financial performance of commercial banks in Cameroon.

Table 1. Reliability statistics of constructs

Reliability Statistics		
Aspects	Questions	Cronbrach's Alpha
Overall		
Number of Cases	Q1-Q5	0.5493
30	Q6-Q10	0.6087
No. of Items	Q11-Q15	0.9773
25	Q16-Q20	0.2840
	Q21-Q25	0.9105

Specific Objective: To determine the influence of digital transfer services, digital payment services, digital withdrawal services and digital savings services on the profitability of commercial banks in Cameroon.

Given that the five point Likert scale questionnaire produced an ordinal scale data, the survey linearised regression model was used to assess the contribution of digital financial services on the profitability of commercial banks in Cameroon. Furthermore, the Taylor linearised variance estimation technique was chosen over the ordinary least square technique because it is suitable for complex survey data and a survey data usually does not fulfill some of the assumptions of Ordinary Least Square such as homoscedasticity.

The survey linearised regression model for this study was adopted and modified from a similar work by Ngumi (2013). This can be simplified as follows;

$$\text{Prof} = f(\text{DFS} + e)$$

$$\text{Prof} = a_0 + a_i \text{DFS}_i + e \text{-----} (1)$$

Where a priori: $a_i > 0$, at 10% level of significance and 90% confidence interval

Techniques of data analysis

The objective of this paper was to determine the influence of digital financial services on the financial performance of commercial banks in Cameroon. To meet these objectives, the variables identified from related literature were further estimated using the Taylor linearized variance estimation technique. The need to generalize and to establish the findings gave the need to carry out multicollinearity test of variables using the Variance Inflation factor

The Correlation Matrix

Considering that the study employed survey data, it was imperative to carry out some sensitivity test using the most common which is the test for multicollinearity. It tests the extent to which the variables of interest in the study correlates with each other since its incidence will lead to bias results. This is seen from the table showing the results of the variance inflation factor (VIF)

Table 1.Results of VIF Test for Multicollinearity

Variables	VIF	1/VIF
Digital Transfer	2.61	0.383373
Digital Payments	2.53	0.395630
Digital Savings	2.47	0.404835
Digital Withdrawals	1.95	0.513595
Mean VIF	2.39	

According to Heckman (2015) the rule of thumb commonly used in practice is that if a VIF is >10 , then there is the presence of high multicollinearity amongst the independent variables. In this result, we had a mean VIF of 2.39 which signified we are in good shape and thus proceeded with the regression analysis. This confirmed the hypothesis of no multicollinearity among the independent variables in the regression model.

The regression model

To analyse the primary data in order to get an insight of the influence of digital financial services on the profitability of commercial banks in

Cameroon, this study adopted and modified the model of Ngumi (2013) who carried out a similar study using multiple linear regression model even though with different variables of interest. In testing the hypothesis, this study therefore made use of the following linear survey regression model;

$$\text{Prof.} = \beta_0 + \beta_1 (\text{D.S.S}) + \beta_2 (\text{D. T.S}) + \beta_3 (\text{D.W.S}) + \beta_4 (\text{D.P.S}) + \mu_i \dots\dots\dots (2)$$

The above model shows that the explained variable was profitability (Prof) of commercial banks measured using questions that captured return on assets for commercial banks that were answered by bank staff. The explanatory variables on the other hand included; Digital Savings Services (DSS), Digital Transfer Services (DTS), Digital Withdrawal Services (DWS), and Digital Payment Services (DPS) while μ_i represents the error term.

Test of significance of the model and model summary

It is important to test the significance of the overall model so that policy makers will be assured of the reliability and validity of the research instrument and the variables used in the model so as to be more confident that the results of the findings are unbiased and instills confidence in them when making decisions. This can be seen from the model summary table.

Table 2a. Significance of the model and Model Summary

Model Summary					
Model	Change Statistics			Df2	Sig. F change
	R Square Change	F Change	df1		
1	0.4876	11.22	4	26	0.000

Based on table 2a an R square value of 0.4876 implies 48% of the variations in the profitability of commercial banks are caused by joint variations in the use of digital transfer services, Digital Saving services, Digital Withdrawal services and Digital Payment services. Consequently 0.52 or 52% of the variations in profitability are not accounted for by the study’s model on digital financial services but caused by the error term. The forecasting power of this is confirmed by the significance of the $P > F$ (0.00) which is significant even at 10% so that the predictions based on digital financial service-profitability model specified in this study could be held at 90% confidence level making the findings suitable for generalizations. To move forward, the results of the survey linear regression model was employed to assess the influence of these variables on Commercial Bank Profitability.

Table 2b brings out the results of the independent variable influence on the dependent variable (Profitability)

Table 3b. Survey Linear Regression Results

Linearized						
Profitability	Coef.	Std. Error	t	P> t (Sig)	95% Conf. Interval	
Digital Transfers	0.5169242	0.2416263	2.14	0.041	0.0227429	1.011105
Digital Savings	0.2917238	0.0833358	3.50	0.002	0.121283	0.4621645
Digital Withdrawals	0.5512949	0.2778834	1.98	0.057	-0.0170404	1.11963
Digital Payments	-0.760525	0.196645	-3.87	0.001	-1.162709	-.3583409
Cons	1.80453	1.399488	1.29	0.207	-1.057744	4.666804

Findings

Summary of Findings

The regression result above shows a 90% confidence level. From the results, Digital Transfers had a positive effect on the profitability of commercial banks in Cameroon to the extent that a unit increase in Digital Transfer services of commercial banks resulted to a 0.5169242 standard increase in profitability. This is in line with the a priori expectation of this paper and it is also statistically significant at 10% level given that the p-value 0.041 is less than the 10% threshold. Thus we rejected the null hypothesis that states that digital transfer services have no influence on the profitability of commercial banks in Cameroon. As a result, serious considerations should be given to Digital Transfer Services when examining measures to improve bank profitability.

In addition, in accordance with the a priori expectation, Digital Savings Services of commercial banks had a positive influence on the profitability of commercial banks in Cameroon. Precisely, a unit increase in Digital Savings services leads to a 0.2917238 standard increase in the profitability of commercial banks This is statistically significant at 10% level since it had a p-value of 0.002 less than 10% threshold with a positive | t | value. Thus we rejected the null hypothesis which states that digital Savings services have no influence on the profitability of commercial banks in Cameroon. It is therefore of great interest for policy makers to know that Digital Savings services are an important component of bank profitability.

Furthermore, the regression result reveals that Digital Withdrawal Services of commercial banks had a positive influence on the profitability of commercial banks in Cameroon. This means that a unit increase in Digital Withdrawals services by commercial banks, will lead to a 0.5512949 standard increase in the profitability of commercial banks in Cameroon with a 10% level of significance given that it has a p-value of 0.057 less than 10% threshold. This is in accordance with the a priori expectation of this study. Thus we rejected the null hypothesis that states that digital withdrawal

services have no influence on the profitability of commercial banks in Cameroon. As a result, serious considerations should be given to Digital Withdrawal services when examining measures to improve on the profitability of commercial banks.

To add, contrary to a priori expectation, the results on Digital Payment services indicate that a unit increase in Digital Payment services leads to a drop in the profitability of commercial banks by 0.760525 units. However, this variable is still statistically significant at 10% since the corresponding p-value 0.001 is less than 10% threshold. Thus we fail to reject the null hypothesis that states that digital payment services have no influence on the profitability of commercial banks in Cameroon. Thus policy wise, focus should be given to Digital Payments when considering factors that determine the profitability of commercial banks in Cameroon since this variable was still found significant.

Going by the constant term of 1.80453, it shows that without the use of digital financial services, commercial banks will still make profit worth 1.80453. However, this value is insignificant even at 10% level of significance since it had a p-value of 0.207 is more than 10% threshold with a high standard error of 1.399488.

Discussion of Findings

The findings from the study generally, reveals that we reject the null hypothesis in favour of the alternative hypothesis which states that digital financial services have an influence on the profitability of commercial banks in Cameroon at 10% level of significance.

Looking at each of the variables, the results on the influence of Digital Transfers Services on the profitability of commercial banks in Cameroon was positive and significant. These findings are in conformity with the a priori expectations of this study and works of other authors such as (Ogare, 2013) who concluded that digital transfer is significant in explaining profitability of commercial banks. More so, a similar study carried out in Pakistan by Sana, Mohammad, Hassan & Momina (2011) found that digital transfer services reduce costs, saves time, improves accuracy, improves reliability and quality of services and eventually leads to improved profitability for banks.

Furthermore, for Digital Payments, the results had a negative coefficient, meaning that Digital Payments Services negatively influence the profitability of commercial banks in Cameroon. This is however not in line with the economic expectation of this study as one will expect that the provision of digital payment services for banking transactions would have boosted economic activities therefore increasing the profits made from the bank's perspectives. There are, however, diverse results from existing

literature on this variable. Boateng & Nagaraju (2020) noted that E-zwich (the brand name for the National Switch and Smart card payment system) related a negative relationship with Ghanaian Bank profit levels. The reason raised for this was due to the scarcity of E-zwich machines that were supposed to be made available by banks. To add, these findings are in conformity with the findings of Takon *et al.*, (2019). They noted that digital payments proxied by Automated Teller Machine (ATM) transactions, Point of Sales (POS) transactions, Mobile Payment (MP) transactions and Web Payment (WP) Transactions has a negative and significant impact on bank efficiency proxied by bank overhead cost both in the long and short run. This however, points to the increasing cost associated with the installation of an ATM in a particular physical location. Unlike mobile payment in which the customer bears the cost of the phone with which to perform the transactions, POS and ATM are born by the financial institutions that have to make it available to their customers for effective dissemination of financial services. However, the works of Boateng & Nagaraju (2020), shows that Gh-Link a local electronic payment ecosystem based on the domestic Automated Teller Machines (ATM) card with channels such as ATM, POS and Web exhibited a positive relationship with the profitability of Ghanaian deposit money banks.

Again, it can be seen that, the results on the influence of Digital Savings Services and profitability of commercial banks in Cameroon was positive and significant. This is in conformity with economic expectations of the study and existing literature and it corroborates with the works of Chindudzi *et al.*, (2020) whose results shows that an increase in digital savings or online deposits will lead to a significant increase in Return on Assets (ROA) of banks precisely, the coefficient for digital savings was $\beta_1 = 0.656533$ and $P=0.0000 < 0.05$ significant at the 1% threshold and 99% confidence interval level. Still in Zimbabwe, similar results were seen in the works of Wadesango & Magaya (2020) who concluded that Return on Assets (ROA) in Commercial Bank of Zimbabwe (CBZ) increased in upwards trends due to an increase in online customer deposits through digital banking platforms. The coefficient of digital savings shows that $\beta_1 = 0.656533$ and $P=0.0000 < 0.05$. The implication is that an increase in online savings or customer deposits would lead to a significant increase in ROA in commercial Banks locally. Though existing literature on digital savings and its influence on bank profitability are limited, so far literature on contrary findings is scarce.

In line with Digital Withdrawals, the study's results show that there is a positive significant relationship between digital withdrawal services and bank profitability. These findings are in line with the prior expectations and existing literature for the study. The results are in line according to the

findings of Vekya (2017) whose results show that there is a positive significant relationship between digital withdrawals and bank profitability. They concluded that a unit increase in Digital Withdrawals leads to an increase in Return on Assets by 1.66 units. Existing literature on digital withdrawal and bank profitability is however scarce. This points to the absence of any contrary findings.

Conclusion

From the results, the study concluded that digital financial services of commercial banks influence the profitability of commercial banks in Cameroon. Specifically, digital savings, digital withdrawals and digital transfer services have a positive and significant influence on the profitability of commercial banks in Cameroon. Digital payment services on the other hand had a negative coefficient yet significant influence. The rendering of digital financial services by commercial banks in Cameroon has a great ability of significantly improving bank profit levels which will further lead to increased returns to shareholders. This is as a result of banks making use of innovative services that have enabled them to make additional income different from their traditional sources, particularly non-interest driven income.

To recommend, this is a call for concern for commercial bank managers and shareholders to ensure they provide robust digital payment services that are cost effective and efficient so as to generate more profit. The reason for the negative coefficient of digital payment could be that most shops in Cameroon do not yet have point of sales terminals that can facilitate payments digitally as such their uses are limited which further reduces the commission generated from the provision of such a service. Bank managers therefore should make sure that their payment services are available in bigger shops particularly those found in the heart of cities like Douala Yaounde, Limbe and even Buea. Again, bank managers could encourage more digital payments than physical cash payments within their institutions. As a result, with reduced cost of rendering such a service and encouraging its use, this may tend to increase the amount of profit banks generate from their digital payment services.

If bank managers and policy makers in the banking industry provide robust digital services, it will go a long way to increase the income generated from commission driven services. This paper therefore recommends that management of banks and policy makers in the banking industry should not only focus on rendering digital financial services but services that are efficient and effective. If this is done, then the result will be reduced waiting time, break bottlenecks, make transactions faster, reduced cost of rendering banking services and consequently growth in profitability for commercial

banks. Commercial Banks in Cameroon will also pay their own quota to curb the recent health crisis COVID-19 as customers will no longer crowd the banks for services that could be rendered digitally. However, this study is limited due to the unavailability of secondary data to complement the primary data.

References:

1. Alubisia, B., Githi, W., & Mwangi, M. (2018). Effect of Technology Based Financial Innovations on Non-Interest Income of Commercial Banks in Kenya. *European Scientific Journal*. Vol.14, No.7 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431
2. Ayuketang, N. (2018). Impact of Technology on E-Banking; Cameroon Perspectives. *International Journal of Advanced Networking and Applications*. Vol. 09 Issue.
3. Boateng , K & Nagaraju, Y. (2020). The Impact of Digital Banking on the Profitability of deposit money banks: Evidence from Ghana. *International Journal of Research in Finance and Management*.
4. Barry, N. (2018). Digital Savings. What do we know about the Impact on Clients?
5. Chindudzi, G., Maradze, T. & Nyoni, T. (2020). The impact of Digital Banking on the Performance of Commercial Banks in Zimbabwe
6. Etikan, I., Sulaiman, M. & Alkassim, R. (2016). Comparison of Convenience Sampling and Purposive Sampling in Africa.
7. Galazova, S., & Magomaeva (2019). The Transformation of Traditional Banking Activity in Digital. *The International Journal of Economics and Business Administration*. Volume VII, Special Issue 2, 2019
8. Heckman, E. (2015). What in the World is a VIF?
9. Kambale, L.(nd). Digital Financial Services. The case of Malawi
10. Karmal, K., Sulieman, I., & Piirainen, M. (2017). Digitalisation of the Financial Sector and Change. *Management*.
11. Kemboi, B. (2018). The Effect of Financial Technology on the Financial Performance of Commercial Banks in Kenya.
12. Ketterer, A.(2017). Digital Finance: New Time Challenges, New Opportunities
13. Lamberton, C. & Stephen, A. (2016). A Thematic Exploration of Digital Social Media and Mobile Marketing: Research Evolution from 2000 to 2015 and an Agenda for future inquiry.
14. LeHouerou, P. (2018). How Technology is Delivering better access to financial services

15. Sana, H., Mohammad, K., Hassan, S., & Momina, A (2011). The impact of E- banking on the Profitability of Commercial Banks. A Study of Pakistani Bank. Journal of Public Administration and Governance Vol.1 ISSN 2161-7104
16. Limunga, C. (2019). Cameroonian Banks to Digitalize for Efficiency.
17. Mueni, B. (2017). The Influence of Digitalisation on the Performance of Digitalized Commercial Banks in Kenya.
18. Ngumi (2013). Effects of Bank Innovation on Commercial Banks in Kenya
19. Ogare, O. (2013). The effect of Electronic Banking on the financial performance of commercial banks in Kenya
20. Porkelsson, S. (2017). Digitalisation in Consumer Banking. How Will Digitalisation Affect Consumer Banking in 10 Years?
21. Saab S. & Vacher J. (2007). Banking Sector Integration and Competition in CEMAC. IMF Working Paper WP/07/03. International Monetary Fund
22. Scott, V., Reenen, J. & Zachariadis, M. (2017). The Long-Term Effect of Digital Innovation on Bank. Performance: An Empirical Study of SWIFT Adoption in Financial Services; Journal of Economic Literature No. 20.
23. Takon, M., Nsofor, S., Ugochukwu, S., Nwonye, N., & Ekeh, C. (2019). Impact of Digital Payment System on the Efficiency of the Nigerian Banking Sector. Journal of Economics, Finance and Accounting Studies (JEFAS)
24. Vekya, M. (2017). Impact of Electronic Banking on the profitability of commercial banks in Kenya. Journal of Technology and System.
25. Wadesango, N., & Magaya, B (2020). The Impact of Digital Banking Services on the Performance of commercial Banks in Zimbabwe. Journal of Management Information and Decision Science. Volume 23 Special

Appendix One

Research Instrument

Questionnaire

I am called Ngwengeh Brendaline Beloke a Ph.D student from the University of Buea. I wish to solicit your time to respond to this questionnaire. The questionnaire is meant to collect data regarding the **Influence of Digital Financial Services on the Performance of Commercial Banks in Cameroon**. Information provided will be used strictly for academic purpose and will be kept confidential.

Hint: Please tick the bracket corresponding to the right answer

General Information

SECTION A: Demographic Information

Gender: Male: Female:
Age: 20-30 : 30-40: 40-60: 60 and above:
Education: O' Levels: A' Levels: First Degree Masters
 Maters and above
Marital Status: Single Married Divorced
Role: Top Level Manager Middle Level Manager Lower Level Manager
Longevity in Service: <1 year 1-3 years 4-6years 6-9 years 10 years and above
Income Level :< 250.000 250.000- 500.000 above 500.000

SECTION B: Digital Financial Services

DIGITAL FINANCIAL SERVICES:	SD	D	N	A	SA
A. DIGITAL PAYMENT SERVICES					
Q1. Through digital means, banks pay the salaries of staff and customers					
Q2. Bank pays their suppliers using digital means					
Q3. Through Digital services, banks are able to pay their utility bills					
Q4. It is possible to make payments for goods using electronic means					
Q5. With digital financial services the volume of digital payments has been increasing over the past 5 years					

B. DIGITAL WITHDRAWAL SERVICES	SD	D	N	A	SA
Q6. Bank staff withdraw their salaries using digital means					
Q7. With digital services, customers can withdraw their salaries					
Q8. Bank customers have the opportunity to withdraw their savings digitally					
Q9. Loans extended to customers can be withdrawn online					
Q10. The Volume of Digital withdrawals has been increasing with digital financial services over the past 5 years					

C. DIGITAL SAVING SERVICES	SD	D	N	A	SA
Q11. The Bank offers digital savings services					
Q12. Bank customers can make deposits into their					

accounts using digital services within the country					
Q13. With digital services, Bank customers can save money into their accounts from their accounts in other countries.					
Q14. Digital services make it possible to move money from a current account and save in a savings account.					
Q15. Due to digital financial services, the volume of digital savings have increased					

D. DIGITAL TRANSFER SERVICES	SD	D	N	A	SA
Q16. With digital transfers, a bank customer can move money from current account to another account within the same bank					
Q17. Banks also do inter- bank transfers using digital services					
Q18. Using digital services, a customer can transfer money from one current account to the current account of another bank within the country					
Q19. It is possible to transfer money from one bank account to another foreign current bank account using digital means.					
Q20. The volume of Digital transfers has increased over the past 5 years with increased use of digital financial services					

SECTION C: Performance Of Commercial Banks

A. PROFITABILITY	SD	D	N	A	SA
Q21. Over the years, the Gross income of the bank has been increasing					
Q22. Net Operating Income generated by bank has been on an increase					
Q23 Return on equity has increased over the years					
Q24. Net income of the bank has been increasing					
Q25. Bank Return on assets has increased					