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Generativity is a Core Value of the ESJ:
A Decade of Growth

Erik Erikson (1902-1994) was one of the great psychologists of the 20th century[1]. He explored the nature of personal human identity. Originally named Erik Homberger after his adoptive father, Dr. Theodore Homberger, he re-imagined his identity and re-named himself Erik Erikson (literally Erik son of Erik). Ironically, he rejected his adoptive father's wish to become a physician, never obtained a college degree, pursued independent studies under Anna Freud, and then taught at Harvard Medical School after emigrating from Germany to the United States. Erickson visualized human psychosocial development as eight successive life-cycle challenges. Each challenge was framed as a struggle between two outcomes, one desirable and one undesirable. The first two early development challenges were 'trust' versus 'mistrust' followed by 'autonomy' versus 'shame.' Importantly, he held that we face the challenge of **generativity** versus **stagnation in middle life**. This challenge concerns the desire to give back to society and leave a mark on the world. It is about the transition from acquiring and accumulating to providing and mentoring.

Founded in 2010, the European Scientific Journal is just reaching young adulthood. Nonetheless, **generativity** is one of our core values. As a Journal, we reject stagnation and continue to evolve to meet the needs of our contributors, our reviewers, and the academic community. We seek to innovate to meet the challenges of open-access academic publishing. For us,

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[1] Hopkins, J. R. (1995). Erik Homburger Erikson (1902–1994). *American Psychologist*, 50(9), 796-797. doi:http://dx.doi.org/10.1037/0003-066X.50.9.796

generativity has a special meaning. We acknowledge an obligation to give back to the academic community, which has supported us over the past decade and made our initial growth possible. As part of our commitment to generativity, we are re-doubling our efforts in several key areas. First, we are committed to keeping our article processing fees as low as possible to make the ESJ affordable to scholars from all countries. Second, we remain committed to fair and agile peer review and are making further changes to shorten the time between submission and publication of worthy contributions. Third, we are looking actively at ways to eliminate the article processing charges for scholars coming from low GDP countries through a system of subsidies. Fourth, we are examining ways to create and strengthen partnerships with various academic institutions that will mutually benefit those institutions and the ESJ. Finally, through our commitment to publishing excellence, we reaffirm our membership in an open-access academic publishing community that actively contributes to the vitality of scholarship worldwide.

Sincerely,

Daniel B. Hier, MD

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Why Does Fashion Fit China So Much?

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Abstract

The paper focuses on investigating the relationship of the cause and effect between cultural behavior and physioeconomy of fashion in China. The purpose is to identify which cultural reasons lie behind the massive adoption of fashion in China, entrusting to these the success of fashion pulling fashion. The methodology adopted is an exploratory comparative analysis between nations (China, Japan, and India) which have cultural physioeconomic similarities, both genuine and artifact. The paper starts from an initial direct observation of the phenomena, checked through a bibliographic review of the background throughout the last 30 years, and supported by a survey supporting the hypothesis. Findings show that fashion was adopted for anthropological reasons of cultural homologation, and not for differentiation due to the specific socio-psychological and cultural structure of the Chinese Nation, similarly to Japan but contrarily to India. The difference in attitudes toward fashion is motivated by cultural reasons. The value of the paper is the exploratory investigation of anthropological behavior, which offers a scoped analysis with practical interest for socially based commodities and following the research course of the motivations behind buying fashion and China. This study is interesting as it will lead to a deeper quantitative research.

Keywords: China, Fashion, Anthropology, Consumer Behavior, Marketing

Introduction
The Chinese and Asian Framework

Over the past three decades, scholars have been studying how physioeconomic phenomena affect social and economic behaviors. Some of these can be found acting more deeply in Asia and they are strongly influencing the socio-economic sphere. Issues like overpopulation (Biao et al., 2017; Chandler Steinberg et al., 1987), anthropological similarity (Pietrusevsky, 1994; Bourgess, 2004; Okano, 2006), and political systems based on mass society (Doak, 2001; Doctoroff, 2012; Doron, 2016; Pye, 1993; Mullaney, 2010), as well as forms of mono-cultural, ethnical, and religious memberships (Harris, 2001; McCleary & Barro, 1996; Okano, 2006; Scaini, 2017; Westerlund, 1996) are physioeconomic elements forming the very puzzling Asian frame. The topics were and still are actual and interesting for the central role of the region in the world economic frame, and for the increasing relevance of the fashion system under both social and economic points of view. Due to this "complex environment", there are two out of three world-leading economies and three out of ten world global economic giants (figures read). Moreover, the three out of ten world's global economic giants are mostly important markets for both fashion and luxury. The relevance of the study always appears to be remarkable. Fashion itself is elevated to a rising role in the business panorama due to the financial and social numbers that it has been able to produce. In addition, it is among the main expenses in several markets and the basic source of income for a vast number of families in many Asian countries (The State of Fashion, 2017). Hence, this results to the hypothesis that the implanted seeds of fashion and luxury are mainly growing, not under the push of Western companies willing to open new markets, but mostly under the pull of the locally stimulated and stimulating physioeconomic background. The present paper is targeting, among those, the cultural anthropologic behavior as the main reason for fashion success. It combines a robust literature review with a consistent exploratory qualitative research based on structured interviews without any interference from the interviewer. Also, there are no interactions with other interviewees in order to understand this growing phenomenon and to validate direct observations. No SOR has been pursued, but it can be considered as a future improvement for an in-depth analysis of the reaction to specific stimulations that led to the author's PhD thesis. The focus of this research is scoped especially on China (which is now called to lead the economic trend of the sector, overthrowing the historical markets (Zhang & Kim, 2013)), in a comparative analysis with other countries and anthropological nations that share a similar socio-economic development and physioeconomic structure, under the view point of cultural behavior. The reasons for investigation are clear and it deserves in-depth studies. This "physioeconomic background" has been leading, since the

late sixties, to specific situations: it is a very "fertile ground" for strategies based on socials and, likewise, for the common concept of fashion.

Literature Review

A robust scholarly research has been conducted, on several titles, toward the discovery of invisible socio-economic phenomena influencing three selected Asian countries: China, Japan, and India (Terry 2015). Thus, the research was gathered in a homogenous work questioning reasons, issues, and specific cultural development of this environment. The literature shows an endemic structure in the physioeconomic background. The theoretical approach entails questioning what is really hiding behind the social behavior in the Far East when approaching fashion and it is adopted as the gnoseological base of the present paper, including recent papers. The general physioeconomic concepts are structured around Parker (1997, 2000), while Nakamura (1964) confirms the classic based on the understanding of the behavior in Asia. Previous papers were used to gather different cases and to offer different physioeconomic evidence (Scaini, 2011, 2012, 2013, 2015; Scaini & Navarra, 2015; Scaini, 2018). Next to general knowledge is the review shapes (Fogel, 1994; Parker, 1995), representing the main studies of the link between physical ambience, climate, and socio-economic development. The study of McCleary and Barro (1996) and Singh (2008) were specially adopted as a base for the specific relationship between Asian environments and religions. Next to more specific papers include: Chandler Steinberg et al. (1987), Dipankar (2000), Harris (2001), and Mishima (2008). The anthropological and ethnic issues, next to traditions (Smith, 1985; Viswanathan, 2014), are strongly targeted as primary causes of the mass behavior in the environment by the qualitative research, and they are mainly based on the study of Bourgess (2004), Doak (2001), Mullaney (2010), Pietrusevsky (1994), and Yang (1996). Eventually, the problem of mass phenomena under socials and politics, gathers all the previous issues in specific national forms. Yet, very common outcomes were explored by Bakken (2000), Callahan (2014), Chen (2004), Gutherie (2012), Jia and Torsten (2017), Pye (1993), and Rambourg (2014) (about the specific formal outcome in China). However, different self-studies and papers was published between 2011 and 2015 on the general contextualization of physioeconomic forces and behavior, as stated by De Mooij and Hofstede (2002), Schütte and Ciarlante (2016), and Wu and Yan (2018).

Research Methodology

The entire literature-based hypothesis has been verified through the survey, using a specific set of questions, and choosing a respectable sample. The selection is based on limited number of screeners. In fact, the exploratory

purpose is also to identify the right set of screeners to obtain a bias-free investigation and reliable basis for the quantitative analysis in SSPS. The methodology is based on an original idea which is derived from direct observation and practical experience that was initially confirmed by secondary sources. The literature review touches and explores different studies about the complex far-eastern Asian framework all through the last 30 years (Terry, 2015). Afterwards, it was narrowed down to the two main fields of the present research, which are: the "*physical environment*" (China, with Japan and India) and the "*physioeconomic environment*": it is "fashion" and its reasons of adoption is hypothesized to be mainly cultural. The methodological reasons the three countries were compared in the investigation, apart from the socio-economic reasons that gather them around the number of key-markets nowadays, are:

- The specific high-contextualization of their culture (making them potentially hostile to mass-adoption of culturally linked products),
- The systematic mass-orientation of the population (making it potentially favorable to mass-adoption of culturally linked products),
- The cross-cultural similarities that are useful to identify hidden forces fostering and hindering fashion.

Data were collected through questionnaires administered online, and 600 answers were obtained with a minimum of 500 validated. The questions asked to all the interviewees in three different environments were the same.

Validation
About the Origin of Respondents and Cultural Influence: Intentionally, 200 interviewees "from or relative to" each of the three considered countries/environments were randomly selected. This is important to mix, in the right proportion, the effect of the meta-brand perception. A total number of 600 answers with a minimum of 500 expectedly validated answers led to a different subtotal from each environment. Anyway, the variation is consistently non-relevant and the single subtotal is acceptably similar.
Cultural Biases: Among the total 600 interviewees and the partial 200 interviewees "from or relative to" each environment, a maximum of 50% of the total questionnaires were expected and accepted from non-autochthons. This is important to limit the effect of cultural biases. The validation of a minimum of 500/600 has interfered with the final ratio by only 2%. External Cultural Analysis: Non-autochthons were required to provide answers to all the three environments, while autochthons were expected to provide answers to only their own environment. Therefore, non-autochthons responded thrice, and it was important to observe the reaction of culturally non-biased interviewees in their observation of the three environments. The final number

of questionnaire usable and validated is 518 (86% of total gathered), and they are free from validation bias and inconsistencies between Q1: Does "X" influence fashion business? (X= GEOgraphy, ANTropology, RELigion, ETHnics, SOCial behavior, INDividual behavior, POLiticis, ECOnomics) and Q12, last question: "Is there any relation between fashion and pshyco-social phenomena?" Moreover, all questionnaires, to be validated, must be free from unanswered questions. The bias and inconsistency between Q1 and Q12 happens if the answers are not aligned (yes-yes or no-no).

Table 1. Excluded answers for biases between Q1 and Q12 and incomplete answers

Environment	Biases	Incomplete	Total	% of exclusions
China	36	10	46/246	18.69
Japan	11	10	21/183	11.47
India	10	15	25/181	13.81
Grand Total	**57**	**35**	**92/600**	**15.33**

The first part of the questionnaire is intended to gather anagraphical, statistically important data. The ratio expresses the proportion between autochthon and non-autochthon respondents in each market kept after the validation (non-autochthons are the same per each market, and must have respond to each market for the validation, 4 interviewees had double citizenship):

- From China and from non-Chinese about China: 200 (% ratio 61/39)
- From Japan and from non-Japanese about Japan: 162 (% ratio 50/50)
- From India and from non-Indians about India: 156 (% ratio 48/52)

Originally, the answers to the questionnaires were sorted between those received from autochthons (Group 1) and those received from non-autochthons (Group 2). The discrepancy between the answers of the group is average *Var(X)=>2%* (Where X refers to Group 1 and Group 2). The final outcome is that China's results are biased mostly among non-autochthons, which also confirms the validity of the new hypothesis H4 and H5 that refers to the lack of deep knowledge of the Chinese physioeconomic reasons for fashion adoption. All incomplete or biased questionnaires (Q1 and Q12) are already invalidated. As a result, the index of variance and its acceptance is reliable. Given that the only possible answers are "Yes" or "No" in Q2~12 (excluded is Q4, which presents the possibility to link two or three environments or to deny the possibility), the relevant data is the ratio between confirming the hypothesis and rejecting and the cross check between different environments.

Table 2. Anagraphical Data (Group 1 – Group 2)

	China - 200		Japan - 162		India – 156	
Origin	Group 1 122	Group 2 78	Group 1 81	Group 2 81	Group 1 74	Group 2 82
Age Range (%)						
<24	15		21		38	
24-34	62		58		30	
>34	23		21		32	
Gender (% F/M)	47/53		44/56		41/59	
Education (%) Degree BA MA/PhD)	17/45/38		10/55/35		29/30/41	

The 12 Questions presented in the Survey
Q1: Does "X" influence fashion business? (Where X= GEOgraphy, ANTropology, RELigion, ETHnics, SOCial behavior, INDividual behavior, POLiticis, ECOnomics)
Q2: "Massification" is the spontaneous or artificial process through which people regroup and gather with others, tending to a generic similarity, and trying to avoid phenomena of social isolation and individualism. Hence, is Massification actual in Japan (Y/N), China (Y/N), and India (Y/N)?
Q3: (Genuinity) Is Massification a historical and/or natural phenomenon and not artificially built by political forces in Japan (Y/ N), China (Y/N), and India (Y/N)?
Q4: Among the aspects mentioned in sub Q1, does China has characteristics in common with Japan (), India (), or both ()?
Q5: Is Massification typically a far-eastern phenomenon? (Y/N)
Q6: Does Massification support fashion in Japan (Y/N)?
Q7: Does Massification support fashion in India (Y/N)?
Q8: Does Massification support fashion in China (Y/N)?
Q9A: Does any mass-background exist in China (Y/N)?
Q9B: Is the Chinese "Massified" background genuine (Y/N)?
Q10: Is there any link between Massification and Fashion (Y/N)?
Q11: Is there any use by people to adopt fashion to gather themselves into social groups (Y/N)?
Q12: Is there any relation between fashion and psycho-social phenomena?

Table 3. Exclusions Based on Biases and Incomplete Answers

Environment	Biases	Incomplete	Total	% of exclusions
China	36	10	46/246	18.69
Japan	11	10	21/183	11.47
India	10	15	25/181	13.81
Grand Total	57	35	92/600	15.33

Table 4. Results of Q1~Q11 (in %)

	JAPAN		CHINA		INDIA		ALL	
	Y	N	Y	N	Y	N	Y	N
Q1: Does "X" influence fashion business? (X= GEOgraphy, ANTropology, RELigion, ETHnics, SOCial behavior, INDividual behavior, POLiticis, ECOnomics)	65	35	56	44	44	56	55	45
Q2: "Massification" is the spontaneous or artificial process through which people regroup and gather with others, tending to a generic similarity, and trying to avoid phenomena of social isolation and individualism. Hence, is Massification actual in Japan (Y/N), China (Y/N), and India (Y/N)?	86	14	94	6	72	28	84	16
Q3: (Genuinity) Is Massification a historical and/or natural phenomenon and not artificially built by political forces in Japan (Y/N), China (Y/N), and India (Y/N)?	65	35	21	79	48	52	45	55
Q4: Among the aspect mentioned in sub Q1, does China has characteristic in common with Japan (), India (), or both ()?	65				32			
Q5: Is Massification typically a far-eastern phenomenon (Y/N)?	81	19	78	22	77	23	64	36

Q6: Does Massification support fashion in Japan (Y/N)?	59	41	64	36	55	45	79	21
Q7: Does Massification support fashion in India (Y/N)?	21	79	20	80	21	79	60	40
Q8: Does Massification support fashion in China (Y/N)?	53	47	67	33	62	38	57	33
Q9a: Does any mass-background exist in China (Y/N)?	88	22	95	5	84	16	89	11
Q9b: Is the Chinese Massified background genuine (Y/N)?	20	80	55	45	28	72	34	66
Q10: Is there any bond between Massification and Fashion (Y/N)?	56	44	75-71	25-29	38	62	56	44
Q11: Is there any use by people to adopt fashion to gather themselves into social groups (Y/N)?	80	20	85	15	78	22	60	40

Table 5. Detailed Results of Q1 (by variable, in %)

	JAPAN		CHINA		INDIA	
	Y	N	Y	N	Y	N
GEO	59	41	31	69	14	86
CUL(ANT)	61	49	73	27	55	45
REL	21	79	51	49	50	50
ETH	81	19	62	38	44	56
SOC-b	74	26	69	31	12	88
IND-b	56	44	10	90	75	25
POL	87	13	84	16	58	42
ECO	85	15	65	35	48	52

Reference:

- GEO: Geography
- ANT: Anthropology
- REL: Religion
- ETH: Ethnics
- SOC: Social behavior
- IND: Individual behavior
- POL: Politics
- ECO: Economics

Q1 is a very important question because double-checked with Q12 offers a proof of non-statistical consistency; it reveals which factor are considered more influential in the adoption of fashion (independently) in the three markets (and can also reveal through a cross-check which factors are the most common); and finally, it reveals the role of the cultural factors. The cultural factors are 6 out of 8 totals, and only CULture and POLitics are

present as relevant factors in the three environments. The factors fostering fashion are consistently higher in China and Japan than in India. The first coupling (China and Japan) counts 5 out of 8 common factors: 4 out of 5 are cultural factors and 4 out of 6 are cultural factors (CULture, SOCial behavior, POLitics, ECOnomy). The second coupling (China and India) has only 4 out of 8: 2 out of 4 are cultural and 2 out of 6 are the total cultural factors (POLitics and CULture). The remaining set of questions is intended to understand the relevance of the phenomenon of "Massification" in the three environments. Massification is explored as genuine or artificial and as the main cultural complex phenomenon of adoption of fashion. Consistently with Q1, it results as the main "complex cultural factor" in China and Japan, but not in India. A second questionnaire, identical to the first, was administered following the same rules but in smaller quantities (fixed maximum number was 100 questionnaires in equal number in the three environments +1 for China). The obtained ratio of valid answers was 86, so the second test can be considered consistent with the first. The purpose was to validate two years after the first investigation of any possible variance or changes. The Var(X)=0.84%, which is within a tolerable variance (Where X refers to the first and second questionnaires). The variation between the first and the second round was:
- About China: <2% in favor of the hypothesis
- About Japan: <0.12% in favor of the hypothesis
- About India: <0.4% in favor of the hypothesis

The irrelevant discrepancy was adopted to verify the integrity of the first round of answers and to maintain the consistency of original proofs.

Analysis
Problem: Why Does Fashion Fit China So Much?
Actually, scholars and experts from the industry remark with a daily frequency how, today in China, luxury and fashion's growth rate is experiencing some never seen augmented pace (see Figure 3) (Helmore, 2014). This is despite the fact that figures of the growth have been severely reappraised (see Figure 1 and 2) (Krugman, 2013). Present paper suggests how real investigations should be focalized on deeper reasons of it all, which might be very different from other business fields, even massive ones. Reasons and issues now seem to collide with a question that could be scholarly educated as: "To what extent does fashion fit China as a result of physioeconomic influence?"
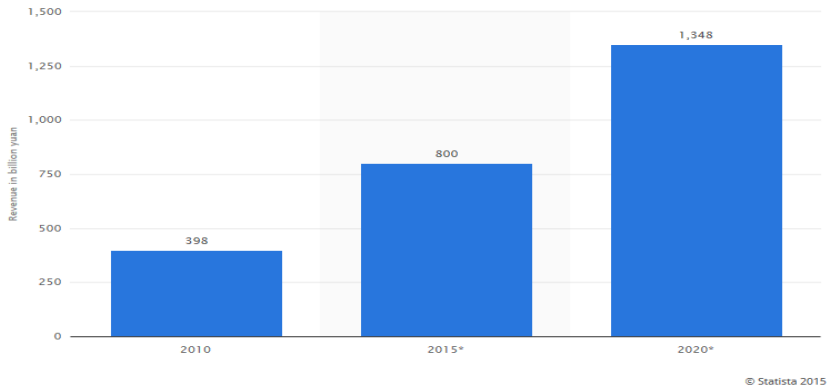
Figure 1. Fashion Retail Revenue in China (2010-2020, in billion RMB)
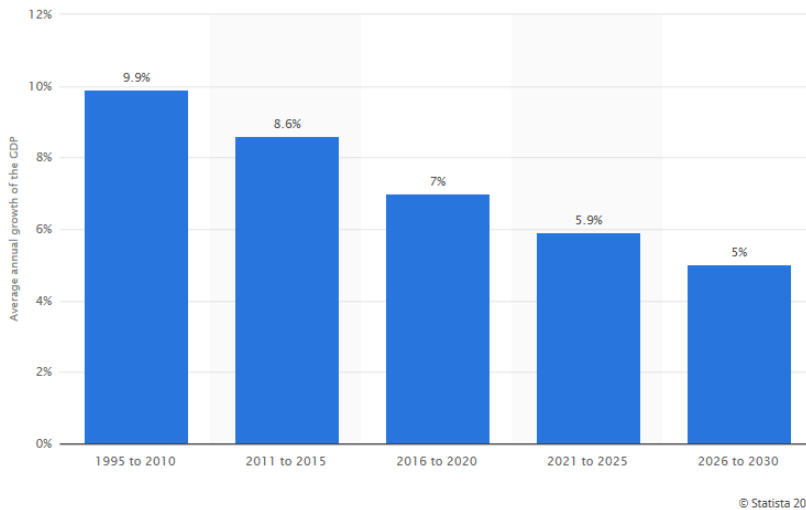(source: Statista© 2015)

Figure 2. Forecast for the average annual growth of Chinese GDP (1995-2030)
(Source: Statista© 2015)

Figures show the growth and the trend of Fashion, and how GDP diverge drastically from 2010 to 2012. This is a neat proof of the loose relationship between power of purchase, or economic growth, and the real turnover generated by fashion in China. Reasons cannot be gathered simplistically around the economic growth of the market (seen as a reason and instead, yet arguably, a consequence of specific anthropological reasons (Chen, 2004; Foegel, 1964), at least in this field, or linked with an undemonstrated search of individuality or self-acknowledgment. Hence, this is often based on a "market feeling" rather than on deep research (Lee & Edwards, 2014). It is a matter of fact that social behavioral reasons are commonly influenced by external factors (theory of social groups and classic physioeconomy give evidence), which is next to recent studies on Chinese perception of value (Hun, Wong & Tjosvold, 2015; Jia & Torsten, 2017; Wu

& Yan, 2018). Moreover, this paper explores different anthropological conditions that appear to be many and help to gather people around fashion and luxury totems in massive forms and around their brand's represented values. It also focuses on how this grouping acts under specific environmental forces (Fogel, 1964, 1994; Parker, 1997, 1997, 2000), religions (Parker, 1997; McCleary & Barro, 2006, 2006), traditional and anthropological factors (Locke et al., 1991; Clark, 1990; Sheer, 2003; Zhou & Belk, 2004; Smith, 1985; Yang, 1996). Paper suggests a comparative verification of the hypothesis between similar countries, which crosses the analysis of the development of different physioeconomic fields. The interesting relationship between money and physioeconomic conditions (Marber, 2003) is considered as subject of future improvement.

Hypothesis

1. The main hypothesis is that fashion fits China and is widely adopted, bought, and consumed in many commodity forms because of the specific physioeconomic background of the Chinese nation, mainly cultural.
   a. Therefore, retail strategies (pushing strategies) of many companies encounter a weak cultural resistance and mostly a fertile background for fashion items (Scaini, 2015). It is physioeconomics that fosters phenomena of pulling fashion, rather than letting them be pushed by external marketing forces and business operations.

2. The second hypothesis suggests that the local cultural values are mostly influencing physioeconomics on the socio-economic environment (specifically the fashion environment), both in a positive way that fosters fashion (Japan, China), or in a negative way (India).
   a. Therefore, the comparative analysis intends to offer reasons and evidence as to why the Chinese and Japanese nations have a psychosocial and cultural behavior linked to a similar fashion consumption (and the Massification of the society is one of these aspects).
   b. Moreover, the analysis proves that this behavior is different from India (despite different aspects being apparently similar) where in fact there is a stronger cultural resistance, making fashion harder to be adopted and pushing strategies less effective.

3. More in depth, a third hypothesis is that the cultural physioeconomic forces considered are actually merged into the Chinese society, which helps to create a fertile ground for fashion strategies of homologation.

Thanks to specific values like Massification and identity equality, analysis proofs.

a. The comparative analysis with Japan's system shows very specific and not so dissimilar conditions.
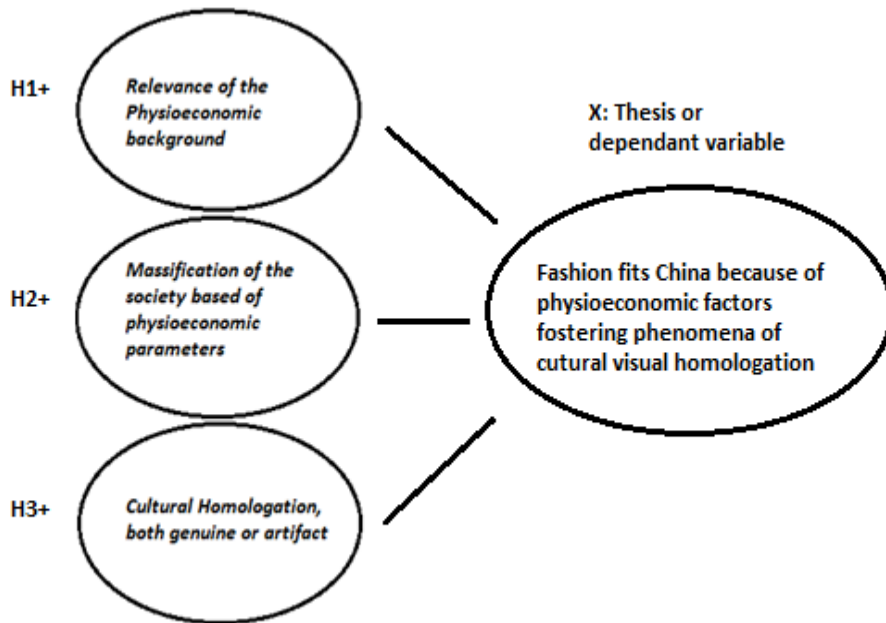b. The comparative analysis with India shows a radically different cultural development.

Figure 3. Proposed Model

As an expected outcome, the fact that very favorable conditions in physioeconomic instances are linked with politics, with traditional structure of the society, and thinking can be found in all three nations. Nonetheless, they are basically acting on consumer behavior in a different way, which is stronger in China. The expected outcomes and the entire research are scoped on consumes and not on purchases, being speculated that the consumes pull fashion into the society, allowing it to become buyable. Also, pushing strategies from the companies are basically acting on the level of retail. This is a specific future recommended improvement of the present research. Expected outcomes can be gathered into three main groups:

1. Fashion fits China because of the specific cultural background, similarly to what happened in Japan
2. Pushing strategies that aim to insert fashion commodities into the retail industry are basically helped by a favorable cultural pulling background.

3. Evidence proving that without a favorable cultural background, pushing strategies fails. This is explained through comparative analysis with similar markets and different success cases in fashion.

Demonstration: Evidence of Physioeconomic and Anthropological reasons that are Pulling Fashion

Comparative Analysis of China - Japan: The comparative investigation is basically focalized on two physioeconomic factors: nationalism and ethnic acknowledgment. The goal was to determine "the way these factors can be spotted in Japanese and Chinese cultures and similarly influence the field of fashion as well as the consumers' actions".

1. *Nationalism:* This entails how historical nationalism, led by a forced closure of Japanese society to outsiders till the XIX or even XX century (Mishima, 2008; Smith, 1985; Okano, 2006), helped fashion, homologation, and the development of a Massified society. The mono-ethnic physical similarity in a small and everlastingly isolated territory is very objective which might have created a nation with a significantly high fashion-oriented perception (based on the meaning of ruled and homogeneous) and a historically favorable market. Figures give evidence of the phenomena. For instance, a consistent 94% of 20 years old Japanese girls living in Tokyo have access to luxury and fashion goods such as Louis Vuitton bags and 90% to Prada (Pellicelli, 2005). All those instances were pulled by a specific tribalism. Urban nomadism, which represents the real countertrend in the vast, and yet, basically homogeneous panorama of Fashion in Japan, passing through the phenomenology of "*Bosozoku"* in the seventies, are just a very representation of what a social life is (Callahan, 2014).

2. *Ethnic Acknowledgement:* This refers to how the self-acknowledgment of the Japanese Nation from a single ethnic group (over 98% of the population is homogenous and self-acknowledged as "Yamato Nation", Doak, 2001; Mishima, 2008), and the consequent strong cultural identity, worked out a natural adoption process of standardized and homologative goods. Such Massification passes through, and passes by, the research of individualism in comparison as scholars proofed. Compared to China, the phenomenon is more genuine. Eventually, 68% of the sample (Q3) confirmed such a hypothesis, with a robust 81% (Q1, answer ETHnology) among the Asian sample saying that, effectively, Japanese people have a somatic similarity and 81% (Q1, answer ETHnology) adding standardized behavior.

Comparative Analysis of China - India: Some similar physioeconomic instances worked in contrary than in most countries with broad geographic environment, and it is interesting for the opposite outcome. This is a further proof of how the human mass factors may be influenced in different ways. Due to the specific conditions that lead to their formation, and regarding the dominant role of religion and traditions when it comes to fashion, a very interesting future with possible improvement exists.

1. *Massification:* In India, this phenomenon did not meet any fertile ground (sample reads only 28% for Q2, Massification as a spontaneous phenomenon). From one side, the socioeconomic poverty (21.9% in 2011 from a 37.2% in 2004 and a 45.3% in 1993, with population living below general poverty) has seized any possibility of a strong massive adoption of fashion instances (World DataBank, 2015; Roberts, 2014). Another important point is the extended specific high cultural context of the country; an aspect in common between Japan and China, which in India, conversely, still makes fashion strategy a hard task. In fact, it tends to homologate and homogenize people, and it is better than remarking and pointing out specificities and individualities. Vindhya (2003) and Viswanathan (2014) stated that it is important in India and it serves as the main outcome of this comparative point with China.

2. *Religion:* Afterwards, it is relevant how the religious influence on society, following McCleary (2006[1], 2006[2]) and Parker (1997[3]) and a recently spotted consequent historical attitude of subdivision into castes, accordingly with Dipankar (2000), influenced the anthropologic behavior, when it comes to fashion. Eventually, the very endemic and high context culture (Nishimura, Nevgi & Tella, 2008) in a comparative study with Japan is linked to a deeper reading of consumer behavior as adopted by Salomon (2011), reporting the importance of individuality. Sample returned 94% (Q2 on Massification) of answers linking China and Massification against a mere 28% for India. In fact, by sorting only Indians from the sample, it reports a robust 88% of a non-Massification-friendly nation. It is an interesting improvement on the comparative analysis of luxury and fashion in India. These figures were reported (Roberts, 2014) and confirmed by Google (returning Fashion 274.000K times and luxury 135.000K with a turnover that has more than a reversed ratio in 2016).

Specific Factors for Comparing China: In China, results are much clearer in the extended framework analysis. Some physioeconomic aspect is in common with India (population, large masses, high cultural context) and Japan (pretended or imposed to be perceived as somatic and ethnic similarity,

and high form of nationalistic political movements). 66% of the sample indicates common physioeconomic characteristics considered with Japan, 65% with India, and sensibly 62% with both (Q4 about characteristics pairing China and India). The main causes of the strong growth of fashion (or hindering it) lie solidly in the way the concepts of people or nation (73%), as well as unity and mass (84%), were fostered throughout history by anthropology and religion (51%) and ethnicity (62%). It enters deeper than elsewhere into the single consumer behavior and also creates a sort of group consumer behavior (69%), which is better than individual (10%). Thus, it recreates conditions of nation and tribalism for huge groups (Q1 on the influence of physioeconomics on fashion business). Shaping on a passive form of homologation, likewise artificial (In fact, it is more than a wrong preconception of the physical similarity in China and 58 different ethnics and languages, means yet something), from where does a Massification similar to the Japanese one come from? It is a form of membership forced by the historical evolution of the country (Friedman, 2016; Greenhalgh & Winckler, 2005; Gutherie, 2012; Pye, 1993; Yang, 1996; China a Nation in Uniform n.d.). For Maoist communism, Doctoroff (2012) stated that an early adoption of uniforms (also uniformed behaviors) is considered as a strong traditional heritage passed safe through the two revolutions (nationalist and communist). Also, the spirit of a compact society, confirmed by the final qualitative outcome, is actually a real wheel for fashion adoption. It is popular in China now to talk about mass-effect, mass-reunion, and mass-grouping of people: a scarcity of individual thinking and individual creativity, which means nothing like design but a way of thinking-acting. According to Nakamura (1964) and Bloom (2014), it is a constant and consistent aspect of the society. Basically, Chinese people like "mass" and "big groups" phenomena and the late fashion adoption might not have started from a desire or necessity of differentiation (different internet sources report this without any evidence), but conversely from the willingness to group (or regroup after shuffling around different values) with other members of the same tribe. Thus, those totemic values include those around whom different western models are acting.

Findings

The main findings can be eventually enlisted as shown below:
- Specific physioeconomic factors do influence the adoption of fashion in China. It is equally evident in Japan, but reasonably different in India. These factors are mainly cultural homologation, ethnical and national self-acknowledgment;
- Fashion is so broadly adopted by Chinese people, thanks to the influence of processes like self-assimilation with mass groups following a very social behavior;

- The process of Massification does not originate from an endemic, nor natural physioeconomics, but it is artificial, conversely from other nations, like Japan. Massification and fashion adoption in China operate in the same way as in Japan;
- Massification in China starts from the same physioeconomic background as in India, but the outcome, that is, fashion adoption, is very different for cultural reasons;
- The reason why fashion is broadly adopted by Chinese people lies in a scheme of physioeconomic membership. Social behavior and fashion behavior are an evident result of specific cultural backgrounds;
- Fashion is highly fostered in China by the specific cultural architecture of the Chinese nation (basically anthropic and non-natural). It is evident also in Japan, even more genuine. Strategies pushing items into the retail system was and is still fostered by the Chinese social structure, like in Japan, but it is hindered in India for cultural reasons relying on religion.

Gathered around the action of a number of hidden physioeconomics, the fashion environment has found in China an easy market, similar to Japan, for a physioeconomic background, which those two nations share, even though they possess a different grade of authenticity. Conversely, the adoption of fashion passes through different actions than in India, despite some original and very common physioeconomic historical aspect, as evidenced by the comparative analysis. Basically, the two nations have been following different paths: China went towards Massification, assimilating it to Japan in fashion adoption, whilst India took a path toward individualism. The qualitative research offers enough evidence on this fact and confirms the vast theoretical existing research. Final answer to the original problem is that fashion fits China due to specific physioeconomics leading to mass-culture. Practically, there are specific historically and culturally forced aspects, which cannot be underestimated, leaving the initiative of business to a mere superficial observation of financial facts and figures. The reason for such strong and effective adoption lies mainly in the cultural assimilation to a social mass model, which is better than in any trivially supposed and never proven search for individualism. There are actually different actions forcing the construction of a national identity (in physioeconomic terms), especially working under the point of view of self-perception of tribal identity, and a consequent different approach to fashion, in different nations, which might have led to a common outcome with surprisingly interesting aspects. Fashion in China, which is much more pulled, encounters no form of cultural resistance and this is conversely for India. Next, it is supposed that the common concept of luxury is adopted in a broad way to create a sort of upper-level cultural tribes, opposed

to sub-cultures (Hitmann & Ward, 2007; Scaini & Navarra, 2015). This means it is opposite to its nature, and it is an interesting future improvement for the collateral research.

Verification and Demonstration

As a common observation between the three countries and as a general commentary, there are aspects of life which are bordering on social and economics group behavior and are influenced by specific anthropological elements such as traditions, religions, and geography. Such aspects are the real keys to open the doors of a strategy based on Massification and mass product in the Far East and that can be explained as *Paraeconomicals* (Scaini, 2105). Such instances are explored as market drivers, where a market is a nation made out of people with acknowledged, perceived, or unnoticed common behavioral characteristics. The verification happens by pursuing extended qualitative research that relies on the primary sources of the present research paper. Scholars stated how that in different East-Asian Countries, the Massification processes was developed and adopted more naturally (Bakken, 2000; Greenhalgh & Winckler, 1996; China a Nation in Uniform n.d.). Furthermore, the interviewees confirmed this characteristic, likewise endemic (Q5, Massification typically eastern phenomenon, 64%). Hence, they suggested how the phenomenon might have supported fashion (Finnane, 2003). It is consistent for Japan (Q6, Massification supports fashion in Japan, 59% of Japanese and 64% other Asians), but not for India (Q7, Massification supports fashion in India, 21% of Indians and 20% of other Asians). It is a coherent and robust opinion of China (Q8, Massification supports fashion in China, 53% and 67%). Basically, this specific social behavior and its influencing issues could have caused a specific form of "Massification" that influences strategies of segmentation, pushing companies to mass-retail strategies, and allowing an equally powerful massively pulling phenomena from huge segments. Here, differences between people are seen as very minor, and there is a strong attempt to be assimilated while assimilating with other members. In this case, the qualitative investigation is arguably divided between those who think that this florid ground was used deliberately (Q9b, genuineness of mass-background in China, 55%) or just found. A very little part of the sample denies the existence of this anthropological structure (Q9a, existence of mass-background in China, 5%). The relationship between Massification and Fashion is evident for the majority (Q10, existence of bonds between Massification and fashion Chinese 75%, other Asians 71%). Eventually, the sample has confirmed the existence of a bond between social mass-structure and fashion in the compared markets as well (Q10, 56% for Japan and 38% for India) and it could be an interesting future improvement to understand the limits of this bond in India, where it is sensibly lighter. Moreover, it has been

proofed that the adoption of fashion is done to recreate new social groups more than for the search of individualism (Q11, fashion to gather into social groups, 60%). All those mentioned phenomena, causing Massification and consequent economic boost of fashion products, have happened due to different reasons. The final result appears like an arguable form of almost instinctive "massive tribalization" (Cova et al., 2007; Scaini, 2015; Beard, 2008). The sample confirmed such a hypothesis from previous research (Scaini & Navarra 2015). The primary source has consistently and solidly verified how, in different environments, the phenomena of fashion adoption have assumed different characteristics throughout the years likewise with very similar results in the creation of a Massified society, ideal ground for fashion, in its homologative meaning. The reason why fashion fits China so much is to be researched in the physioeconomic background pulling it, just like what happened in Japan but conversely in India. This was despite very similar forces like a highly contextualized culture (Scaini, 2015; Viswanathan, 2014), religious structure of the society (Dipankar, 2000; Harris, 2001), and socio-economic structure (Nishimura, Nevgi & Tella, 2008; Vindhya, 2003). The collected and analyzed data are a valid sample that leads to a deeper and broader research, which will start from a statistical analysis in order to validate the results (consistency, collinearity, validity, and inference) and in order to exclude potentially relevant bias.

Conclusion

The paper was able to consistently affirm the existence of a physioeconomic background that makes a specific cultural environment very receptive towards fashion strategies (which means nothing like clothes but is more meant for standardization strategies). This kind of background is effectively attracting products and companies into the market. Also, it is fostering financial and commercial success of companies and products, together with the cultural aspects of fashion. The same background could have followed an alternative route leading to limiting issues. The paper suggests that a robust comparative analysis may practically help a company to choose the right marketing and business strategy to apply to its policies in some cultural contexts, which is better than focusing on the mere economic environment. The behavior of social groups, and both the historical path as well as an anthropological evolution, is actually a key driver for these strategies.

Limitations and Future Improvements

Actual limitations include the lack of quantitative measurements of the result, under the point of view of an accurate mathematical model due to lack of funds. Moreover, the main physioeconomic forces in action can be studied

more in-depth, together with the interesting effect of wealth or physical ambience (Fogel, 1994). The last interesting limitation lies in the actually unexplored link between self and external perceptions, which has been slightly proofed through the crossed verification (Figure 5) to be regularly adopted as evidence in the present paper. It has offered interesting points of discussion, especially concerning Q6 and Q8 (support of fashion in Japan and China through Massification), and slightly for Q7 and Q10 (support of fashion through Massification in India and eventual bonds between fashion and Massification). The future recommended improvements, appearing urgent in the sense of understating the role of fashion and standardization in the Asian framework, include the understanding of social behavior in comparative analysis with the western one and the measure of fostering and hindering effect in a practical investigation, which is mathematically based. The hypothesis of a Japanese custom Massification of the society (with relevant derivative phenomena like urban tribes) can be another interesting future improvement. Consequently, the present paper, counting on a solid implant of scholarly theories, statistic figures and confirming them through a consistent qualitative research, gives evidence of the physioeconomic reasons and causes influencing fashion phenomena in Far Eastern Asian environments. Hence, it can be improved by entering into the depths of the specific reasons of the Chinese market in a comparative study that considers more than the 8 specific physioeconomic points or by considering them in a deeper way, when applied to fashion strategies. Three further points deserve future research:

- Is SOR analysis based on deeper and broader analysis in order to understand the exact relevance, validity, collinearity, and inference of the data?
- Why does China adopt imported fashion, while India gathers around genuine cultural values? Can the politically imposed Massification be considered as one of the reasons?
- Do the same fashion outcomes appear to be applicable to other mass products?
- How is luxury result influenced, or not influenced, by similar physioeconomic factors as fashion?

References:
1. Anderson, E. (1990). *Streetwise: Race, Class, and Change in an Urban Community*, University of Chicago Press, Chicago, IL.
2. Bakken, B. (2000). *The exemplary society: Human improvement, social control, and the dangers of modernity in China*, Oxford University Press, Oxford, UK.
3. Beard, N.D. (2008). "The branding of ethical fashion and the consumer: a luxury niche or mass-market reality?", *Fashion Theory*,

Vol 12, Issue 4, pp. 447-467, available at: http://www.tandfonline.com/doi/pdf/10.2752/175174108X346931#.Vcwz3P_osdU (accessed 12 December 2021

4. Biao, X., Yeoh, B.S.A. & Toyota, D. (2017). "Asia. Return: Nationalizing transnational mobility in Asia" in *Journal of Southeast Asian Studies,* Duke University Press, Durham, NC

5. Bloom, A.H. (2014). *The linguistic shaping of thought: A study in the impact of language on thinking in China and the West*, Psychology Press, Aarhus, DK.

6. Burgess, C. (2004). "Maintaining identities: Discourses of homogeneity in a rapidly globalizing Japan", *Electronic Journal of Contemporary Japanese Studies*, Article 1 in 2004 First published in ejcjs on 19 April 2004, Revised and republished in ejcjs on 29 May 2012. Available at: http://www.japanesestudies.org.uk/articles/Burgess.html (accessed 2 October 2021).

7. Callahan, K. (2014). "The Bosozoku Are Japan"s Disappearing Rebels without a Cause", *Japlink*, 10 April 2014, available at: http://jalopnik.com/the-bosozoku-are-japans-disappearing-rebels-without-a-c-1642416129 (accessed 3 December 2021)

8. Chandler, D.P., Steinberg, D.J. *et al.* (1987). *In search of Southeast Asia: A modern history*, University of Hawaii Press, Honolulu, HW.

9. Chen, M. (2004). *Asian management systems: Chinese, Japanese and Korean styles of business*, Cengage Learning EMEA, London, UK

10. China a Nation in Uniform n.d. (2022). Available at: info.texnet.com.cn/ (Translated and edited by womenofchina.cn) (accessed 18 August 2022)

11. Clark, T. (1990). "International Marketing and National Character: A Review and Proposal for an Integrative Theory", *Journal of Marketing,* Vol. 54, No. 4 (October 1990), pp. 66-79, available at: Stable URL: http://www.jstor.org/stable/1251760 (accessed 4 April 2022)

12. Cova, B., Kozinets, R.V., & Shankar, A. (2007). *Tribes Inc.: the new world of tribalism, in Consumer Tribes*, Butterworth-Heinemann, Oxford, UK.

13. De Mooij, M. & Hofstede, G. (2002). "Convergence and divergence in consumer behavior: implications for international retailing", *Journal of retailing*, 78(1), 61-69.

14. Dipankar, G. (2000). *Interrogating Caste: Understanding Hierarchy and Difference in Indian Society*, Penguin Books, New Dehli, India

15. Doak, K.M. (2001). "Building national identity through ethnicity: Ethnology in wartime Japan and after", *Journal of Japanese Studies*,

Vol. 27, No. 1 (Winter), pp. 1-39 available at stable URL: http://www.jstor.org/stable/3591935 (accessed 5 April 2022)

16. Doctoroff, T. (2012). *What Chinese Want: Culture, Communism, and China''s Modern Consumer*, Palgrave MacMillan, New York, NY.

17. Doron, Y. (2016). *The Tower of Babel: Massification, Individuality and Empathy in Large Societies and in Small groups. Group Analysis*", 49(2), 124-133, available at: http://journals.sagepub.com/doi/abs/10.1177/0533316416639219 (accessed 15 December 2021).

18. Essoo, N. & Dibb, S. (2004). "Religious influences on shopping behaviour: An exploratory study." *Journal of Marketing Management* 20.7-8 (2004): 683-712.

19. Finnane, A. (2013). *Changing clothes in China: Fashion, history, nation*, Columbia University Press, New York, NY

20. Foegel, R.W. (1964). *Railroads and American Economic Growth: Essays in Econometric History*, John Hopkins, Baltimore, MD

21. Foegel, R.W. (1994). "Economic Growth, Population Theory and Physiology: The Bearings of Long-Term Processes on the Making of Economic Policy", *American Economic Review*, Vol. 84, No. 3, Jun., 1994, pp. 369-395 Available at Stable URL: http://www.jstor.org/stable/2118058 [(accessed 6 June 2022)

22. Friedman, E. (2016). *National identity and democratic prospects in socialist China*. Routledge, London, UK

23. Greenhalgh, S. & Winckler, E.A. (2005). *Governing China''s population: From Leninist to neoliberal biopolitics*, Stanford University Press, Redwood, CA

24. Guthrie, D. (2012). *China and globalization: the social, economic, and political transformation of Chinese society*, Routledge, London

25. Hamilton, G.G. (1996). *Asian Business Networks*, Vol. 64, Walter de Gruyter, Berlin – New York, NY.

26. Harris, I. (2001). *Buddhism and politics in twentieth century Asia"* A and C Black, London, UK.

27. Hebdige, D. (1981). *Subculture: The Meaning of Style*, Routledge, London, UK

28. Helmore, E. (2014). "Luxury brands in a quandary as China's wealthy young develop resistance to bling", *The Observer*, 20 September 2014

29. Hitmann, T. & Ward, J. (2007). "The Dark Side of Brand Community: Inter-Group Stereotyping, Trash Talk, and Schadenfreude", *Advances in Consumer Research*, Vol.34/2007, available at: Vol.34/2007, available   at:

http://www.acrwebsite.org/volumes/v34/500861_100445_v1.pdf (accessed 8 August 2022)

30. Hun, C., Wong, A.S.H. & Tjosvold, D. (2010). Turnover intention and performance in China: The role of positive affectivity, Chinese values, perceived organizational support and constructive controversy", *Journal of Occupational and Organizational Psychology*, Vol. 80, pp. 735–751, available at: http://www.researchgate.net/publication/229594264 (1 August 2022 Jia, R. & Torsten, P. (2017). "Individual vs. Social Motives in Identity Choice: Theory and Evidence from China", available at SSRN: https://ssrn.com/abstract=3029045 (1 march 2022)

31. Keller, C., Magnus, K.H., Hedrich, S. & Thomas Tochtermann, P.N. (2014). "Succeeding in tomorrow"s global fashion market" *Consumer and Shopper Insights 2014*, McKinsey and Company, available at: http://www.mckinseyonmarketingandsales.com/sites/default/files/pdf/CSI_Apparel2020-NEWBRAND.pdf (accessed 25 November 2021)

32. Krugman, P. (2013). "Myth of Asia"s Miracle", *Foreign Affairs*, Vol 73, no. 6 pp. 62-78, available at: 192.200.129.132 http://vault.hanover.edu/~eiriksson/classes/214/files/MythOfAsiasMiraclePaulKrugman.pdf (accessed 12 August 2022)

33. Lee, X.E. & Edwards, S. (2014). "Fast Fashion in China: Revved Retail. After years of extraordinary growth, has fast fashion peaked in China?", *China Business Review*, 24 February 2014, available at: http://www.chinabusinessreview.com/fast-fashion-in-china-revved-retail/ (accessed 6 August 2022)

34. Levine, R., Locke, C., Searls, D. & Weinberger, D. (2001). *The Cluetrain Manifesto: the end of business as usual*, Perseus Books Group, Ney York, NY

35. Marber, P. (2003). *Money changes everything: How global prosperity is reshaping our needs, values, and lifestyles*, FT Press, Upper Saddle River, NJ

36. McCleary, R.M. & Barro, R.J., (2006). "Religion and economy.", *The Journal of Economic Perspectives*, Vol. 20, No. 2 (Spring), pp. 49-72, American Marketing Association, available at stable URL: http://www.jstor.org/stable/30033650 (accessed 30 November 2021)

37. McCleary, R.M. & Barro, R.J. (2006). "Religion and political economy in an international panel" in *Journal for the Scientific Study of Religion*, Vol 45, Issue 2, pp. 149-175, available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1468-5906.2006.00299.x/pdf (accessed 8 January 2022)

38. Mishima, Y. (2008). *Lezioni spirituali per giovani samurai*, Feltrinelli, Milano, Italy

39. Mullaney, T. (2010). *Coming to terms with the nation: ethnic classification in modern China* Vol. 18, Univ of California Press, Oakland, CA

40. Nakamura, H. (1964). *Ways of Thinking of Eastern Peoples: India, China, Tibet, Japan*, East-West Center Press, Honolulu, HW

41. Nishimura, S., Nevgi, A. & Tella, S. (2008). "Communication style and cultural features in high/low context communication cultures: A case study of Finland, Japan and India", in *Renovating and developing subject didactics. Proceedings of a subject-didactic symposium in Helsinki,* Vol. 2, No. 2008, pp. 783-796 (February). Available at: http://www.helsinki.fi/~tella/nishimuranevgitella299.pdf (accessed 14 June 2022)

42. Okano, K.H. (2006). "The global–local interface in multicultural education policies in Japan", in *Comparative Education*, Vo. 42, No 4, pp. 473-491, available at: http://www.tandfonline.com/doi/abs/10.1080/03050060600988387#. VdFfD__osdV (accessed 5 January 2022)

43. Okonkwo, U. (2007). *Luxury fashion branding: trends, tactics, techniques*, Palgrave Macmillan, London, UK

44. Parker, P.M. (1995). *Climatic Effects on Individual, Social and Economic Behavior: A Physioeconomic Review of Research Across Disciplines*, Greenwood Press,

45. Parker, P.M. (1997). *Linguistic cultures of the world – a statistical reference*, Greenwood press, Westport, CN

46. Parker, P.M. (1997). *Ethnic cultures of the world – a statistical reference*, Greenwood press, Westport, CN

47. Parker, P.M. (1997). *Religious cultures of the world*, Greenwood Press, Westport, CN

48. Parker, P.M. (2000). *Physioeconomics: the basis for long-run economic growth*, MIT Press, Cambridge, MA

49. Pellicelli, G. (2005) "*Strategia*", Egea, Milano

50. Pietrusewsky, M. (1994). "Pacific-Asian relationships: a physical anthropological perspective" in *Oceanic Linguistics*, University of Hawaii Press, Honolulu, Vol. 33, No. 2 (December), pp.407-429. Available at stable URL: http://www.jstor.org/stable/3623136 (accessed 13 April 2022)

51. Promos (2017). http://www.promos-milano.it/Informazione/Note-Settoriali/Le-Opportunita-Del-Settore-Moda-In-Cina-ASEAN-Giappone.kl (accessed 7 December)

52. Pye, L.W. (1993). "How China's nationalism was Shanghaied", in *The Australian Journal of Chinese Affairs*, No. 29, January, pp. 107-133,

available at stable URL: http://www.jstor.org/stable/2949954 (accessed 4 February 2022)

53. Rambourg, E. (2014). *The Bling Dynasty*, Wiley, New York, NY. Also available as article at: http://www.businessinsider.com/chinese-vs-japanese-luxury-booms-2015-1 (accessed 4 February 2022)

54. Roberts, F. (2014). "Inside India"s High Growth Luxury Market", *Euromonitor International* (19 September 2014). Available at: http://blog.euromonitor.com/2014/09/inside-indias-high-growth-luxury-market.html (accessed 1 February 2022)

55. Salomon, M. (2011). "Consumer Behavior: Buying and Being", Pearson, Prentice Hall, Upper Saddle River, NJ

56. Scaini, L. (2011). "Il rapporto tra l"internazionalizzazione e la physioeconomia", *SetupImpresa*, Available at http://www.setupimpresa.it/sp/it/articolo/il-rapporto-tra-linternazionalizzazione-e-la-physioeconomia.3sp (accessed 10 April 2022)

57. Scaini, L. (2012). "Il sincretismo culturale nel marketing moderno: scienza economica e scienza sociale", *SetupImpresa, a*vailable at http://www.setupimpresa.it/sp/it/articolo/il-sincretismo-culturale-nel-marketing-moderno-scienza-economica-e-scienza-sociale.3sp> (accessed 10 April, 2022)

58. Scaini, L. (2015) "To What Extent Can the Physioeconomic Factors Be Quantitatively Measured to Prove Their Influence on the Mechanical Results of the Ayal and Zif"s Matrix?", in *IMPACT: International Journal of Research in Business Management*, Vol. 3, Issue 3, Mar 2015, pp. 81-100, Available at http://www.impactjournals.us/download.php?fname=2-78-1427531617-8. Manage - TO WHAT EXTENT CAN THE - Luca Scaini.pdf (accessed 10 August 2022)

59. Scaini, L. & Navarra, D. (2015). "Modern Totems and Tribalism: the Worship of Brand in Asia", *European Scientific Journal*, Vo. 11, No. 13, May 2015, pp. 17-33

60. Scaini, L. (2015). "A Comparative Study of Physioeconomics in Asia", in *IV European Scientific Forum, European Scientific Society,* Oxford, UK

61. Scaini, L. (2017). "The Way How Anthropological Culture Shapes Consumes: An exploratory Comparative Study", paper for the International Multidisciplinary Conference Cambridge (UK), 23-25 November, 2017, available at http://isfcambridge.euinstitute.net/images/9th.ISF.Cambridge.pdf

62. Schütte, H. & Ciarlante, D. (2016). *Consumer behaviour in Asia*. Springer, Berlin, Germany

63. Singh, P.B.R. (2008). "Heritage Contestation And Context Of Religion: Political Scenario From Southern Asia" *Politics and Religion Journal*, *2*(1), 79-99

64. Smith, R.J. (1985). *Japanese society: Tradition, self, and the social orde*", CUP Archive, Cambridge, UK

65. Sood, J. & Yukio, N. (1995). "Religiosity and nationality: An exploratory study of their effect on consumer behavior in Japan and the United States." *Journal of Business Research* 34.1 (1995): 1-9.

66. Statista: http://www.statista.com/statistics/243990/revenue-of-the-fashion-retail-segment-in-china/

67. Teather, D. (2010). "China overtakes Japan as world"s second-largest economy", *The Guardian*, 16 August 2010. Available at: http://www.theguardian.com/business/2010/aug/16/china-overtakes-japan-second-largest-economy1 (accessed 17 August 2022)

68. Terry, E. (2015). *How Asia Got Rich: Japan, China, and the Asian Miracle: Japan, China and the Asian Miracle*, Routledge, London, UK

69. The State of Fashion (2017). https://www.mckinsey.com/industries/retail/our-insights/the-state-of-fashion (accessed 28 January 2022)

70. Vindhya, U. (2003). Psychology in India: Intersecting Crossroads, Concept Publishing Company, New Dehli, India

71. Viswanathan, B. (2014). *How does the Indian concept of individuality differ from its Western counterpart?*, available at: http://www.quora.com/How-does-the-Indian-Concept-of-individuality-differ-from-its-Western-counterpart (13 August 2022)

72. Westerlund, D. (1996). *Questioning the Secular State: the worldwide resurgence of religion in politics,* C. Hurst and Co. Publishers, London, UK

73. World Data Bank (2022). http://data.worldbank.org/country/india (accessed 4 January 2022)

74. Wu, B. & Wan, Y. (2018). "What do Chinese consumers want? A value framework for luxury hotels in China" *International Journal of Contemporary Hospitality Management* just-accepted (unpublished)

75. Yamada, M. (2000). *Parasaito shinguru no jidai* パラサイト・シングルの時代. Chikuma Shobō [筑摩書房].

76. Yang, M. (1996). "Tradition, Traveling Anthropology, and the Discourse of Modernity in China", *The future of anthropological knowledge*, Psychology Press, Aarhus, Denmark

77. Zhang, B. & Kim, J.H. (2013). "Luxury fashion consumption in China: Factors affecting attitude and purchase intent." *Journal of Retailing and Consumer Services*, 20(1), 68-79.

78. Zhou, N. & Belk, R.W. (2004). "Chinese consumer readings of global and local advertising appeals" *Journal of Advertising*, 33(3), 63-76

Psychosocial Factors as Predictors of Academic Behavioural Confidence among Pre-Medical Students of University of Ibadan

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Abstract

Academic behavioural confidence is an important non-cognitive factor which has a significant tendency to influence students' academic achievement and future aspirations. When an individual has little or no self-confidence in his academic pursuit, it could lead to frustration, low self-esteem, depression, and emotional distress which could eventually result to academic failure. If academic behavioural confidence is as important as stated above, then there is a need to investigate the predicting factors of the concept. This study, therefore, focuses on the role of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment on academic behavioural confidence among pre-medical students of University of Ibadan. The descriptive research design was adopted for this study, using the ex-post facto type. Two hundred (200) pre-medical students of University of Ibadan were randomly selected. Data collected were analysed using Pearson Product Moment Correlation (PPMC) and multiple regression at 0.05 level of significance. The result revealed that there is a significant relationship between the independent and dependent variables among pre-medical students of University of Ibadan. In terms of magnitude, achievement motivation was the strongest predictor ($\beta = .332$, $t = 5.287$, $p < 0.01$), followed by religiosity ($\beta = .308$, $t = 5.272$, $p < 0.01$), psychological adjustment ($\beta = .185$, $t = 3.279$, $p < 0.05$), and emotional intelligence ($\beta = .184$, $t = 2.937$, $p < 0.05$). Based on

the findings, it is therefore recommended that since achievement motivation has been found to be the strongest predictor of academic behavioural motivation among the participants, parents (most especially) and others who share close ties with the students should motivate the students to achieve their desired goals and aspirations. Teachers and lecturers could also intrinsically motivate the students through their positive and constant words of encouragement all through the tedious academic and medical training. Such re-assuring words like "It is not hard", "I did it, you can also do it" would alleviate the fear of failure.

Keywords: Academic behavioural confidence, Pre-medical students, Emotional intelligence, Parental support, Achievement motivation

Introduction

Through every educational journey, the level of confidence an individual has is a pivotal determinant of his or her overall academic success. Hence, the concept of academic behavioural confidence is a key factor which has spurred heightened interest among teachers, parents, educational psychologists, amongst others. Bandura (1977) and Luszczynska and Schwarzer (2005) stated that an individual can possess confidence to complete a particular task successfully, but may lack confidence in some other areas, generally. Hence, this study focuses on academic behavioural confidence, which is an individual's ability to succeed in 'academic-related' tasks. The concept of academic achievement has been commonly said to be influenced solely by cognitive factors, such as Intelligence Quotient (IQ), memory, and others. However, recent studies have shown that non-cognitive factors, such as academic self-efficacy, self-control, motivation, emotional intelligence, and others, contribute largely in predicting academic success. Amongst these non-cognitive factors is the concept of academic behavioural confidence, which is a strong key in determining the student's academic success or achievement. Sanders and Sanders (2004) defined the concept of academic behavioural confidence as how students differ in the extent to which they have a 'strong belief', firm trust, or sure expectation of how they will respond to the demands of studying at the university. In simple terms, it is the existence of confidence in an individual's educational journey. It is a term which refers to the belief that students have that they can perform competently in a particular learning situation. Students' belief about showing necessary study behaviour in their academic career has a predictive role on their coping skills (Sander et al., 2006). When people have confidence in what they do, there is a high likelihood of success in such a task or an activity. On the other hand, it has been perceived that a child who has a low level of confidence and sees himself as worthless would be less confident and may not come up with optimum level of

attainment (Stevens, 2005). Such students with low academic confidence enter college with low academic skills. They are known to be less actively involved in school activities, and they face transitional difficulties than others (Shoesmaker, 2010; Sander & Sanders, 2005).

Parental support is one of the variables in this study. Parenting is seen as a balance of behaviours which can influence a child's outcome. Various studies have been carried out on the impact of parental support on students' academic performance. One of such studies was conducted by Bushra and Rehana (2010). Their findings showed that parents' contribution to their children's education had a consistent and positive effect on their academic achievement and self-concept. On the other hand, excessive parental involvement can be perceived by students as a controlling behaviour. As much as the school and teachers have their roles to play in fostering a child's academic success, the roles of parents must also not be lagging. According to Gonzalez-Pieda, Nnnez, Gonzalez-Pumariega, Alvarez, Roces, and Garcia (2002), "without the children's parental support, it is hard for teachers to devise academic experiences to help students learn meaningful context". When students' academic success is influenced by the involvement and support they receive from their parents, this will invariably boost the children's academic confidence. Interestingly, research has shown that parental support in doing home tasks has significant effects on students' achievement (Singh, Granville, Sandra & Dika, 2002; Eilam, 2001).

The relationship between academic behavioral confidence and parental support has been rarely investigated by researchers. This is most likely because academic behavioural confidence is a relatively novel topic of discourse in the research field. However, some studies relating to this have been carried out on similar concepts to academic self-confidence which include academic self-efficacy, self-confidence, amongst others. The empirical findings will therefore explore the previous studies in these areas and other similar areas. Bofah and Ntow (2017) conducted a study on the perceived social support from parents and teachers' influence on students' mathematics-related self-beliefs. They further examined the mediating role of students' self-confidence and the relationship between students' perceived social support from parents, teachers, and self-concept. The findings of the research revealed that perceived social support statistically and significantly predicts students' mathematical self-belief, while students' mathematical self-confidence was found to play a mediating role between perceived social support and mathematics self-concept. The findings supported the view that supportive social relationships (of which parental support is inclusive) influence students' self-beliefs (including self-confidence). The findings of this research further revealed that perceived parental support has a statistically significant, positive, and direct effect on self-confidence. However, perceived

parental support was discovered to be the weakest predictor of students' self-concept. In plain terms, the result revealed that students' perceived support from parents influenced their self-confidence, which, in turn, enhanced their self-concept. Also, self-confidence was considered to be a partial mediator between parental support and self-concept.

Rachel, Jonathan, and Kristina (2015) examined if parental support or parental involvement is more important for adolescents. The result of their findings showed that the two concepts of parental support and parental involvement are important to a child's academic well-being. Their findings showed that a positive association exists between parental support and self-efficacy in the academic setting. Furthermore, Weihua and Cathy (2010) researched into the effects of parental involvement on students' academic self-efficacy, engagement, and intrinsic motivation. The result showed that parental advising positively predicted students' academic self-efficacy in English.

Another related concept to academic behavioural confidence is self-esteem. Baharudin and Zulkefly (2009) carried out research on the relationships between students' fathers and mothers, as well as self-esteem and academic achievement among college students. It was discovered that the quality of parent-adolescents showed positive significant relationship with self-esteem. This means that adolescents who have good and quality relationship with their parents have a higher self-esteem than others who do not. It can therefore be assumed that a high level of self-esteem would influence the development of self-confidence amongst adolescents through the existence of good and quality relationship with parents. In view of the above submission, it can be hypothesised that parental support will significantly predict academic behavioural confidence among pre-medical students of University of Ibadan.

Motivation is another variable in this study. Motivation is considered as one of the most important foundations essential for students' academic development (Steinmayr & Spinath, 2009). More specifically, academic motivation is a psychological dimension considered important, if not the most important in human learning and development (Roeser & Eccles, 1998; Scheel, Mdbhushi & Backhaus, 2009). It has been discovered that students who are motivated academically perceive school and learning as valuable. They love to learn and equally enjoy learning-related activities (Eccles & Wigfield, 2002; Zimmerman, 2000, 2008). On the contrary, lack of motivation negatively affects the students as it leads to disengagement from school, underachievement, and an eventual dropping out of school (Azzan, 2007; Glass & Rose, 2008; Janoiz, Archmbault, Morizot & Pagani, 2008,). Hence, a student who becomes a drop out victim and lacks motivation in general, will, in the nick of time, lose academic confidence and can end up committing

suicide. Motivation, in itself, is a general recipe for academic success and confidence is needed to achieve positive learning outcomes.

Karimi and Saadatmand (2014) carried out research on the relationship between self-confidence and achievement based on academic motivation. The results showed that the relationship between academic self-confidence and academic achievement were predictors of academic achievement. Research on changes in achievement motivation among university freshmen by Dresel and Grassinger (2013) revealed that the motivation for achievement deteriorated significantly over the course of the first year of university students, and a large number of these students were affected due to many factors. The study pointed out that increased levels of difficulty and higher demands different from secondary school days could be possible reasons for the deterioration of motivation for achievement among first year students. In this present study, the participants are of similar level and are pre-medical students. This field of study is always considered rigorous with a very high demand. Hence, the core of this research is to establish their level of achievement motivation and identify how achievement motivation could affect or influence the academic behavioural confidence.

In addition, Onete, Edet, Udey, and Ogbor (2012) carried out research on academic performance among Education Students of Cross River University of Technology. Their research also focused on examining the relationship between the achievement motivation and academic performance of first year students. The findings revealed a contrary outcome that academic achievement motivation of education students had no significant influence on their academic performance. One of the justifications given for this result was that merely expressed desire to achieve set goals without an analysis of previous performances or improvement would lead to unachieved academic expectations. For the purpose of this study, academic behavioural confidence might not be boosted if individuals merely imagine their achievement. This would mean that achievement motivation is not only a configuration of the mind, but adds to itself some level of practicality. After all, 'if wishes were horses, beggars will ride'. This study viewed that achievement motivation requires some level of actual performance before it can likely influence academic behavioural confidence. Nonetheless, the author opined that a certain level of achievement motivation is needed for effective learning and positive academic performance.

Recent research by Izuchi and Onyekuru (2017) examined the relationships among academic self-concept, academic motivation, and academic achievement among college students. Academic self-concept is concerned with how individuals feel about their academic capabilities, and this involves the feelings of confidence and firm trust in capability termed "academic behavioural confidence". Therefore, the research result of this

related concept would give a clue on the likely outcome of the variable of the study. The result of the study showed that academic self-concept, academic motivation or achievement motivation, and academic achievement are closely related to and significantly correlated to one another. It was further explained in the study that students with a high level of self-concept develop high self-confidence, and, in line with the study, such students would develop a high level of academic behavioural confidence that would help them in their academic achievement. The study further established that a significant and positive relationship exists between academic self-concept and academic or achievement motivation. Subsequently, when students are motivated to achieve desired goals, there is a high likelihood of attaining success and their academic behavioural confidence would be strengthened. In view of this, this study seeks to understand the impact of achievement motivation on academic behavioural confidence among pre-medical students of the University of Ibadan.

The concept of Emotional Intelligence is another variable in this study. Emotional intelligence has been widely researched on by different stakeholders. Numerous researches have investigated the relationship of the concept with other variables in the educational setting. However, none has been carried out to correlate the concept with academic behavioural confidence. Therefore, for the purpose of this research work, the empirical findings will focus on previous researches which investigated the correlation of emotional intelligence with other related educational and self-concepts. Emotional intelligence is explained as the innate potential to feel, use, communicate, recognise, learn from, manage, understand, and explain one's emotion and that of others (EQI, 2005). The concept of Emotional intelligence is very crucial as it is key to any successful human relationship, and those who master it are usually successful in other areas of their lives (Zainuddin, 2000). Therefore, inability of a student to adapt to learning situations or inability to cope in the midst of challenges would pose a big threat to such individual's level of academic confidence and can, in turn, be a stroll towards academic failure. In other words, people who do not believe in their abilities get disappointed while facing risky circumstances and are less likely to operate effectively. These sets of people get scared of dealing with challenging issues, their performance is affected negatively, and feelings of inadequacy set in (Maddux, 1995). Therefore, an individual with a high level of emotional intelligence can control his emotions and deal with problems positively. This, in turn, boosts his level of academic confidence and prompts a positive academic achievement. Consequently, feelings of confidence is increased when the level of emotional confidence rises. Odedokun (2020), while investigating the determinants of academic resilience among medical students of Obafemi Awolowo University, Ile Ife, Osun State, found that emotional

intelligence skills and training are very important in the course of their study in order for them to be successful in the medical profession. This is not unexpected as they deal with lives, and such attributes can boost their effectiveness both at the academic and professional settings. Also, it was revealed that at the academic setting, emotional factors, such as lack of peer support, competitive environment, rigid, authoritative and non-encouraging faculty, lack of recreational activities, staying away from home, financial problems, uncertain future, cultural and minority issues, and mismatch between capability and expectation, are some generators of stress among medical students (Wolf, 1994; Supe, 1998; Schneider, 2007). Hence, considering the high level of stress expected in the field of medical education, a balance between those that stress people and those that are stressed will be highly important. Emotional intelligence can become a tool to achieve this expected balance in order to facilitate optimum productivity and success. It is therefore important to investigate the construct on the academic behavioural confidence among pre-medical students of University of Ibadan.

At every cultural belief system, religiosity is considered an integral part of one's culture since it influences human behaviour to a large extent. Its influence on humans is so high that some individuals' religion is identified through their way of behaving, talking or even dressing. Hence, understanding the concept of religiosity provides valuable insights into the similarities and differences across culture. The search for a generally accepted theory or definition for religion has faced great difficulties (Clarke & Byrne, 1993). However, scholars have birthed numerous definitions of the concept of religion. McDaniel and Burnett (1990) defined religion as a belief in God, which is accompanied by a commitment to follow principles believed to be set forth by God. Terpstra and David (1991), in their definition, viewed religion as a socially shared set of beliefs, ideas, and actions that relate to a reality that cannot be verified empirically. However, it is believed to affect the course of natural and human events.

From ancient times, religion has been used as a tool to seek answers to the complexities of human nature. Religion is an important factor which has significant influence on people's attitudes, values, and behaviours at both individual and societal levels. Religion and its practices usually play an important role in influencing numerous important life transitions such as childbirth, marriage, etc. It also influences the moral choice of values that are important to an individual, and it shapes public opinion on social issues such as cohabitation, pre-marital sex, family planning, organ donation, amongst others. Furthermore, the influence of religion extends to the determination of what is forbidden and allowed for consumption, with strict restrictions on drinking and eating. As much as religion affects the values and beliefs of people, it also has high influence at the educational sector. Hodge (2007)

carried out research on the released time in public schools, where students are allowed to be absent from classes to attend spiritual instruction off campus. Hodge discovered that the students who participated in those activities do not end up with a low academic score because they missed a class, but rather the participation in this programme seemed to improve their academic performance and achievement. In the same vein, a study carried out to evaluate the factors that affect academic performance among African American youths stated that church attendance is significant in predicting positive academic outcomes. The research showed that African American youths attending church have higher academic outcomes compared to their peers (Williams, Davis, Miller, Saunders & Williams, 2002).

In the same vein, a similar study was carried out by Walker and Dixon (2002). They discovered that spiritual beliefs, religious beliefs, and religious participation were positively related to academic performance. The study raised the deliberation on incorporating spirituality into academics because students who participated in religious activities or had spiritual beliefs had better academic performance. The concept of religiosity is not a novel term in the research field. It has been extensively researched on and correlates with other variables in past years. However, no research in the past years has examined the relationship between religiosity and the main variable of this research-academic behavioral confidence. Some related concepts were, however, researched on in the past, and they correlated with the concept of religiosity. Studies have found that religious believers have higher social self-esteem (Aydin, Fischer & Frey, 2010) and are better psychologically adjusted (Koenig, McCullough & Larson, 2001; Smith, McCullough & Poll, 2003) than non-believers. This research indicates that religion makes people better, and it can only be a predicting factor for confidence in religious countries. In such situation, religious people feel confident and better than others, not because they are religious but because they fit into the crowd. Farshad, Farrahbakhsh, and Salmabadi (2015) investigated the correlation between religious belief, life expectancy, and self-efficacy of students. The result of the findings showed that students' religious beliefs predicted their self-efficacy. A significant positive relationship was discovered between religious beliefs and self-efficacy. It was concluded in the study that university students with high religious beliefs positively impacted their self-efficacy. This implies that individuals who are religious gain guidelines through their religion which strengthens them and increases their level of confidence, capability, and life skills. In the same vein, students at the university level can enhance their behavioural confidence in academics through their religious engagement. Therefore, it could be stated that religious students at religious universities have higher self-esteem than religious students at non-religious universities.

Consequently, religion is hypothesised to predict academic behavioural confidence.

The last variable of this research is psychological adjustment. Life gets more challenging, difficult, and stressful as humans age. Many have been able to adjust to these difficulties while others, however, react negatively to these life changes and challenges by deploying the use of various coping mechanisms among which suicide is so prevalent. Inability to adjust to life challenges and changes has led many to committing suicide, and the rate at which suicide is increasing is very alarming. World Health Organization (2017) stated that suicide is the second leading cause of death among 15-29 years old globally due to the inability to deal with and adjust to life stresses. Therefore, adjustment is a necessary factor for total wellbeing in all areas of life, be it academic, marriage, career, and others. If adjustment in an area is unachieved, wellness can be forfeited. Hence, individuals who are able to adjust to life demands and changes will develop an increased level of self-confidence. This is applicable in most life spheres, including the academic world. When students adjust to school transition, they will be able to cope adequately with its demands, and this will be a boost for their self-confidence and vice-versa. Like other previous empirical findings in this study, the concept of psychological adjustment has not correlated with academic behavioural confidence in the past years. Hence, past findings which correlated to the concept of psychological adjustment and other variables related to the dependent variable of this study will be explored.

One of such research was carried out by Dadarigashti, Amoopour, and Akbari (2016). The research focused on the relationship between psychological adjustment and social protection, as well as academic self-concept and academic achievement among high school female students. The result of the research showed that psychological adjustment and social support are most relevant to academic self-concept. In the same vein, academic self-concept and academic achievement are most relevant to psychological adjustment. According to the author, a child can maintain self-concept through affection, love, and intimacy from the family. This will equip him/her with a favourable character. A favourable and positive development of character will build up his confidence, and he will be able to face challenges without un-necessary anxiety or inappropriate behaviour. This will infer that ability to adjust can build confidence in an individual, and an individual's confidence in his/her ability can help him/her to adjust appropriately. Thus, an interactional relationship can exist between academic behavioural confidence, which is also an aspect of self, and the concept of psychological adjustment. This study, therefore, investigates the influence of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment on academic behavioural confidence among pre-medical students of the

University of Ibadan. In view of this, the following research questions are generated.

Research Questions

    (1) What is the joint contribution of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment on academic behavioural confidence?

    (2) What is the relative contribution of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment on academic behavioural confidence?

    (3) What is the relationship between each of the independent variables and the dependent variable?

Research Design

The study adopted the descriptive research design of the ex post facto type. This is because alteration and manipulation of variables is not involved in this study.

Participants

The participants chosen for this study were Two hundred (200) pre-medical students who were randomly selected from the University of Ibadan. Their ages range from 17 to 24 years, with S.D =3.8 in terms of gender. 52.5% were Males while 47.5% were Females.

Instrumentation

Academic Behavioural Confidence Scale: This scale was developed as a psychometric means of assessing the level of confidence that pre-medical students of the University of Ibadan have in their own anticipated study behaviours as it applies to their degree programme. It was published by Sander and Sanders as Academic Confidence Scale (2003) and renamed as Academic Behavioural Confidence Scale (2006). The scale consists of 24 items, with responses rated on a continuum from 1 – 4; where 1 rates 'Not confident at all' and 4 rates 'Very Confident'. The scale was reported with a high level of internal reliability (Cronbach's alpha 0.88). Some of the items on the scale include: 'How confident are you that you will be able to study effectively on your own in independent/ private study?', 'How confident are you that you will be able to attain good grades in your work?'

Parental Support: The college version of the Perception of Parents Scale (POPS) was used for this study in other to assess pre-medical students' perception of their parents' autonomy support, involvement, and warmth perception. The scale is a 42 items scale with 21 items each meant for fathers and mothers. This scale was chosen because many studies (e.g., Simons,

Paternite & Shore, 2001) have suggested that the relationship of adolescents with their parents should be considered separately, and not as a single dimension. The scale was developed by Robbins (1994). Some of the items in the scale are: 'My mother, whenever possible, allows me to choose what to do', 'My father listens to my opinion or perspective when I've got a problem'. The scale uses a 7-point Likert scale ranging from 'not at all' (1), to 'somewhat true (4), and 'very true' (7). The test retest of Cronbach's alpha was carried out, and it reflected a value of 0.78.

Achievement Motivation: The Academic Motivation Scale (AMS- C 28) was used to assess what motivates pre-medical students to attend school. It was developed by Vallerand, Pelletier, Blais, Briére, Sénecal, and Valliéres (1992). The scale was translated from its French version to English, and it showed a high level of internal consistency with a value varying from .83 to .86, which is close to the value obtained from the original French scale of .76 to .86. It consists of 28 items, out of which 20 were chosen to assess students' achievement motivation, and it obtains a Cronbach' alpha of 0.75. It makes use of a 7-point Likert response format ranging from 'Does not correspond at all' (1) to 'Corresponds exactly' (7). Some items in the scale include: 'I am going to college because without a high school degree I would not find a high-paying job later on', 'Honestly, I don't know; I really feel that I am wasting my time in school'.

Emotional Intelligence: The emotional intelligence scale was designed as a culturally sensitive and dependable measure of perceptions in all domains of emotional intelligence among pre-medical students of the University of Ibadan. It was developed by Afolabi, (2017). The scale has adequate validity and reliability evidences as depicted in the works of Ezeokana, Obi-Nwosu, and Okoye (2014), Ome, Okorie, and Azubuike (2014), and Onukwufor (2013). It is a 40 items scale with response format ranging from 'strongly disagree' to 'strongly agree. The reliability for the overall measure of the scale was .77. Sample items in the scale include: 'I am good at reading people's feelings', 'I find it difficult relating with other people'.

Religiosity: The Religious Commitment Inventory (RCI-10) was used as a device to access the religiosity of pre-medical students of the University of Ibadan. The scale was developed by McCullough, Worthington, and Rachal (1997). It showed a high degree of consistency with coefficient alpha of 0.93 for the full scale, 0.92 for Intrapersonal Religious Commitment, and 0.87 for Interpersonal Religious Commitment items. This scale was chosen because of its neutrality to measure religiosity without a specific tenet of faith. It consists of 10 items used to assess students' religiosity, and it makes use of a 5-point Likert response format ranging from 'not at all true of me' (1), to 'totally true of me' (5). Some items in the scale include: 'Religion is especially

important to me because it answers many questions about the meaning of life', 'Religious beliefs influence all my dealings in life'.

Psychological Adjustment: The Brief-Adjustment scale was used to measure the psychological adjustment of pre-medical students. It is a six-item self-report measure of general adjustment, which was developed as a shorter alternative to the most commonly used instrument known as Outcome Questionnaire. Sample items in this scale are: 'To what extent have you felt tense, anxious and/or afraid this week?", "How much has emotional distress interfered with feeling good about yourself this week?" The six items are in a seven-point Likert scale format ranging from 1= not at all, 4= somewhat, 7= extremely. Those who score high indicate low general adjustment.

Data Collection

The research instrument was administered to pre-medical students by the researchers. Through the help of two research assistants, they were able to distribute and collect questionnaires to and from each level.

Data Analysis

The data generated from the survey was analysed using Pearson product moment correlation and multiple regression analysis at 0.05 level of significance.

Result

Research Question 1: What is the joint contribution of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment on students' academic behavioural confidence?

R = .649 ADJR^2= .406					
R^2= .421 Std. Error = 9.30981					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	12121.879	5	2424.376	27.972	.000^b
Residual	16641.116	192	86.672		
Total	28762.995	197			

Table 1. Regression Summary showing the joint contribution of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment on students' academic behavioural confidence

Table 1 above showed significant joint contribution of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment on academic behavioural confidence: F (5, 192) = 27.972, p < 0.05. The multiple regression model revealed R = .649, R2 = .421,

and Adjusted R2= .406. This implies that the five independent factors account for 40.6% (Adj R2 = 0.406) variance in respondents' academic behavioural confidence. Factors that account for the remaining variance are beyond the scope of this study.

Research Question 2: What is the relative contribution of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment to students' academic behavioural confidence?

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
	(Constant)	22.453	7.174		3.130	.002
	Emotional Intelligence	.237	.081	.184	2.937	.004
	Religiosity	.401	.076	.308	5.272	.000
	Psychological Adjustment	.256	.078	.185	3.279	.001
	Parental Support	.057	.065	.050	.886	.377
	Achievement Motivation	.209	.039	.332	5.287	.000

Table 2. Regression Summary showing the relative contribution of parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment to students' academic behavioural confidence

Table 2 above reveals that four of the variables (emotional intelligence, religiosity, psychological adjustment, and achievement motivation) are potent predictors of respondents' academic behavioural confidence, except parental support. The strongest predictor of academic behavioural confidence was achievement motivation (β = .332, t = 5.287, p < 0.01), followed by religiosity (β = .308, t = 5.272, p < 0.01), psychological adjustment (β = .185, t = 3.279, p < 0.05), and emotional intelligence (β = .184, t = 2.937, p < 0.05). This implies that achievement motivation, religiosity, psychological adjustment, and emotional intelligence will increase academic behavioural confidence by 33.2%, 30.8%, 18.5%, and 18.4%, respectively. The result also reveals that parental support has no tendency of increasing students' academic behavioural confidence. This is quite surprising since parents are known to be strong stakeholders in a child's life. However, the result of this shows the dynamism of research. Parental support is discovered to have no tendency of increasing academic behavioural confidence among pre-medical students of the University of Ibadan. Nevertheless, adolescent maturational level of the participants, male gender domination among the participant of this study, amongst others, can be influential factors.

Research Question 3: What is the relationship between each of the independent variable and the dependent variable?

Table 3. Inter-correlation Matrix of independent and dependent variables

Variables	1	2	3	4	5	6
Academic Behavioural Confidence	1					
Emotional Intelligence	.224**	1				
Religiosity	.384**	.545**	1			
Psychological Adjustment	.522**	.288**	.323**	1		
Achievement Motivation	.338**	.585**	.901*	.295**	1	
Parental Support	.389**	.679**	.384**	.595**	.338**	1
Mean	43.08	30.57	25.35	31.26	25.11	33.66
Standard. Deviation.	5.79	3.93	5.81	7.13	6.32	4.99

Table 4.7 shows that the significant relationship that exists between the independent variables (parental support, emotional intelligence, religiosity, psychological adjustment, and achievement motivation) are potent predictors of the dependent variable (academic behavioural confidence) among pre-medical students of the University of Ibadan. Thus, the result is presented as follows: emotional intelligence (r = .224, N= 250, p < .05), religiosity (r = .3848, N= 250, p < .05), psychological adjustment (r = .522, N= 250, p < .05), achievement motivation (r = .338, N= 250, p < .05), and parental support (r = .389, N= 250, p < .05).

Discussion of Findings

The results showed that the independent variables (parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment) had significant relationship with academic behavioural confidence among pre-medical students of the University of Ibadan. This finding was supported by many researchers (Sanders & Sheldon, 2009; Richardson, 2009) who recognised the important role a strong positive bond between homes and schools plays in the development and education of children. Also, Sheldon (2009) research showed that successful students have strong academic support from their involved parents. Although the findings of the study are coherent with previous studies, parental support was revealed to have little impact on academic behavioural confidence in this study. The findings of the research further revealed that a positive relationship exists between achievement motivation and academic behavioural confidence. This finding is in line with the generalisation made by Unruh and Alexander (1970), who pointed out that highly motivated students tend to have a positive self-concept. Since confidence is an aspect of 'self', students' motivation invariably influences their self-confidence as well. In addition, Hartshorn (1966) pointed out the importance of motivation at school by indicating that 'the skillful

teacher will consistently use everything he knows about motivation to make certain that learning activities are motivated at the highest level possible'. Furthermore, the findings of the research showed that emotional intelligence also has a moderate effect on academic behavioural confidence. This implies that a positive relationship also exists between emotional intelligence and academic behavioural confidence. According to Vela (2003), if emotional intelligence skills are developed, strengthened, and enhanced, students may demonstrate increased levels of personal (this is in relation with self-confidence), academic, and career achievement. Truthfully, confidence and emotional intelligence are necessary for individual to succeed in social situations.

The research findings additionally revealed that religiosity has an effect on academic behavioural confidence. Hence, a positive relationship exists between academic behavioural confidence and religiosity. Furthermore, a study conducted by Amaliyah (2017) showed that even the knowledge of the teachers' religious identity was potent enough to influence students' performance at the academic setting. Also, Jeynes (2003) established, in his findings, that religiously committed urban children perform better in most academic measures than their less religious counterparts, despite extraneous variables such as socio-economic status, race, and gender. This could be as a result of the numerous religious diversity and intense religious exposure gotten from the urban area. The findings of this research are also in tandem with research carried out by Hoffman (1998). It was revealed that the confidence of younger members, who attended religious services regularly, was higher than that of those who less frequently attended religious services. Based on intense study, the high level of education of religious leaders and the intense knowledgeable discussions at religious centers are valid to confirm that religiosity will influence the academic behavioural confidence of pre-medical students. In addition, the religious center is one of the largest socialisation centers where skills are trained and duties are delegated This could be another reason why it has so much influence on the participants of this study. However, Psychological Science added a varying view to the body of research by stating that religious belief only influences individuals' self-esteem and confidence in countries that are considered to be religious (i.e., countries that emphasise religious beliefs). The analysis of their result revealed that self-esteem of believers was lower in countries where religion is not central to the culture. A likely explanation was given for this. It was analysed in the findings that religious people feel better about themselves and develop high confidence in religious countries because they fit into their world, not necessarily because they are religious people. This could be another reason for the result gotten from this research as Nigeria is no doubt ranked amongst the most religious

countries. More so, the findings of this research could also have been influenced by location.

In addition, the results of the research finally showed that a positive relationship exists between psychological adjustment and academic behavioural confidence. This supports the findings of Dadarigashti et al. (2016), which showed that psychological adjustment is most relevant to academic self-concept and academic achievement. This means that an individual who is able to adjust to his or her environment will develop a positive concept of self in aspects of academic behavioural confidence, self-esteem, amongst others. However, inability to adjust will puncture the confidence of an individual in his ability. Also, stress will be heightened and this can lead to unpleasant consequences like academic underachievement and suicide. It was revealed, however, that psychological adjustment has a small effect on students' academic behavioural confidence.

On the other hand, the result of the first research question showed that the five independent variables (parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment) jointly contribute to academic behavioural confidence, while the result of the second research question revealed that only four out of the five independent variables contribute to academic behavioural confidence. Achievement motivation, emotional intelligence, religiosity, and psychological adjustment were revealed to be potent predictors of the respondents' academic behavioural confidence. Surprisingly, parental support was shown to have no tendency of increasing academic behavioural confidence. This is in contrast to the existing findings that teachers and parents contribute to students' self-beliefs, which was termed by Murdock and Miller (2003) as the "additive-effect". It suggests that the strength in one construct might compensate for the weakness in another. The finding is also a divergence from the research carried out by Felson (1989), where it was stated that students have a higher self-efficacy in the academic setting when parents provide support. A factor that could explain the reason for this disparity or difference in findings is that the afore-mentioned studies focused on self-efficacy while this study focuses on the more specific term of academic behavioural confidence. Nonetheless, there has been no study which specifically researched on the influence of parental support on academic behavioural confidence. Although previous studies have shown that parental support influences related concept (self-efficacy), the result of this research indicate that parental support only has a high influence on self-efficacy but has no tendency of increasing academic behavioural confidence. In plain terms, this means that an individual who has no parental support has the tendency of developing academic behavioural confidence. This is because parental support has been discovered to have no tendency of increasing academic behavioural confidence. These findings provide a clue on

the reason why quite a number of orphans come out successful and confidently take lead roles irrespective of the parenting gap. Also, the unexpected outcome in this research can be as a result of the domination of the masculine gender as the participants used for this study. This is because the masculine gender is usually known to be less emotional, more logical, and more independent than the feminine group. Hence, they derive satisfaction in displaying their prowess and masculinity by being solely free from parental intrusion. Some fend for themselves rather than requesting for parental help, which has built up their level of independence. Since a larger percent of the participants are males (72.5%), this could be the reason why parental support was discovered to have no tendency of increasing academic behavioural confidence. It must be stated also that the societal and even religious description of the male gender has infused a sense of independence in the male child. The religious setting terms males as 'the head', just as the Yoruba culture terms them as 'the Oloriebi' (the head of the family), no matter how young the male child is. This perception has been developed in every male child unconsciously, right from their tender age, and this is another reason for their sense of independence as discovered in this research work. Also, the participants of this study are adolescents, and the period of transition to adulthood is a delicate period and a stage of confusion. The adolescent stage is characterised particularly by different behavioural turn-outs and a high need for independence from parental influence. Hence, adolescents usually build a high resistance against parental influence at this stage, and this can be another probable reason for the findings of this research.

Furthermore, out of the four variables revealed to be the predictors of academic behavioural confidence, achievement motivation was identified to be the strongest predictor of academic behavioural confidence. It also had a high tendency of increasing academic behavioural confidence. This is not unexpected as motivation has been considered as one of the strongest and most important foundation essential for students' academic development. Religiosity was discovered to also be the next highest predictor of academic behavioural confidence, which is followed by psychological adjustment and emotional intelligence.

Conclusion

The findings of this study revealed that the independent variables (parental support, achievement motivation, emotional intelligence, religiosity, and psychological adjustment) had significant relationship with academic behavioural confidence among pre-medical students of the University of Ibadan. Emotional intelligence skills and its competences have been found to be indispensable tools in promoting academic resilience among pre-medical students. Also, the other variables were found to be factors predicting

academic behavioural confidence among pre-medical students of the University of Ibadan. In view of this, special attention should be given to the independent variables in this study as far as academic behavioural confidence among pre-medical students of the University of Ibadan is concerned

Recommendations

Pre-medical students should be exposed to the importance of academic behavioural confidence and its effectiveness as a tool for facilitating academic achievement. Hence, students should be trained on how to improve their academic behavioural confidence by teaching them specific learning strategies, such as self-confidence, study skills, inclusion of cooperative or collaborative learning structure, participation in peer-led trainings, constant positive self-statement and self-motivated beliefs, amongst others. Since achievement motivation has been found to be the strongest predictor of academic behavioural motivation, teachers and parents (most especially), and others who share close ties with the students should motivate the students to achieve set goals. Teachers and lecturers can also intrinsically motivate students through their positive and constant words of encouragement all through the tedious academic work. Such re-assuring words like "It is not hard", "I did it, you can also do it" would alleviate the fear of failure rather than words like "No one can pass beyond 70%", or "You are all dullards, I do not believe in your capacity to pass well". Words like the latter would decrease achievement motivation in most students, compared to the former. Furthermore, the research has pointed out the influence of religiosity on students' academic behavioural confidence. Therefore, religious teachers and leaders have their role to play in fostering their members' academic behavioural confidence through proper religious guidance. Lastly, the service of an emotionally intelligent coach can be employed by parents, schools, or even the students so as to learn assertion skills, setting boundaries, and setting the act of maintaining harmony in the midst of academic challenges that confront medical students in their day-to-day activities.

References:
1. Afolabi, O. A. (2017). Indigenous emotional intelligence scale: Development and validation. Psychological Thought, 10(1), 138–154.
2. Amaliyah, S., Anwar, K., & LubabinNuqul, F. (2017). The Effect of Religious Identity toward Academic Performance: An Experimental Study. Presented at 6th Annual International Conference on Cognitive and Behavioral Psychology, 6-8 March 2017, Singapore.
3. Aydin, N., Fischer, P., & Frey, D. (2010). Turing to god in the face of ostracism: effects of social exclusion on religiousness. Personal Socio Psychological Bulletin. 36, 742–753.

4. Azzam, A. (2007). Why Students Drop Out. Educational Leadership. 64. 7. 91-93.

5. Baharudin, R. & Zulkefly, N.S. (2009). Relationships with father and mother, self-esteem and academic achievement amongst college students. American Journal of Scientific Research 6, 89-94.

6. Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. Psychological Review, 84, 191–215.

7. Bofah, E.A. & Ntow, F. D. (2017). Perceived social support from parents and teachers' influence on students' mathematics-related self-beliefs. African Journal of Educational Studies in Mathematics and Sciences, 13, 41-62.

8. Bushra, I. & Rehana, M. K. (2010). Impact of Physical Satisfaction and Academic Performance   and Self-Efficacy of the Students. Journal of Research and Reflection in Education 4(1), 14 – 26.

9. Clarke, P. & Byrne, P. (1993). Religion Defined and Explained. Macmillan, London.

10. Dadarigashti, K., Amoopour, M., & Akbari, B. (2016). The relationship between psychological adjustment and social protection with academic self-concept and academic achievement among high school female students in Rasht. International Journal of Medical. Research in Health Sciences. 5: 473–479.

11. Dresel. M. & Grassinger, R. (2013). Changes in Achievement Motivation among University Freshmen Journal of Education and Training Studies, 1, No. 2; 159-173.

12. Eccles, J.S. & Wigfield, A. (2002). Motivational beliefs, values and goals. Annual Review of Psychology, 53, 109–132.

13. Eilam, B. (2001). Primary Strategies for Promoting Homework Performance. American Educational Research Journal, 38 (3), 691-725.

14. EQI (2005). Definition of Emotional Intelligence (EI, EQ). Retrieved 9 August 2019 from: http://www.merriam-webster.com/dictionary/emotion.

15. Ezeokana, J. O., Obi-Nwosu, H., & Okoye, C. A. F. (2014). Influence of street life and gender on aggression and self-esteem in a sample of Nigerian children. International Review of Management and Business Research, 3(2), 949-959.

16. Farshad, R.M., Farrahbakhsh, I., & Salmabadi, M. (2015). Simple and Multiple Correlation Between Religious Belief, Life Expectancy and Self-Efficacy of Student. International Journal of School Health. 2(3)1-5

17. Felson, R. & Zielinski, M. (1989). Children's self-esteem and parental support. Journal of Marriage and the Family, 51, 727-735.

18. Glass, R. & Rose, M. (2008). Tune out, turn off, dropout. American Teacher, 93 (3) 8-21

19. Gonzalez-Pienda, J.A., Nnnez, J.C., Gonzalez-Pumariega, S., Alvarez, L., Roces, C., & Garcia, M. (2002). A Structural Equation Model of Parental Involvement, Motivational, Altitudinal Characteristics and Academic Achievement. The Journal of Experimental Education, 70 (3), 257-287.

20. Hartshorn, W. (1996)."The Teaching of Music," Perspectives in Music Education: (3rd ed.). Bonnie Kowall. Washington, DC.

21. Hodge, D.R. (2007). Releasing students from class for spiritual instruction: Does it hinder academic performance? Children & Schools 29 (3), 161-171.

22. Hoffmann, J. (1998). Confidence in Religious Institutions and Secularization: Trends and Implications. Review of Religious Research, 39(4), 321-343.

23. Izuchi, M.N. & Onyekuru, B.U. (2017). Relationship among Academic Self Concept, Academic Motivation and Academic Achievement among College Students European Journal of Research and Reflection in Educational Sciences 5: 93- 102

24. Janosz, M., Archambault, I., Morizot, J., & Pagani, L.S. (2008). School Engagement Trajectories and Their Differential Predictive Relations to Dropout. Journal of Social Issues, 64: 21-40.

25. Jeynes, W. (2003). The Effects of Religious Commitment on the Academic Achievement of Urban and Other Children. Educational Urban Sociology. 36.44-62

26. Karimi, A. & Saadatmand, Z. (2014). The Relationship between Self Confidence with Achievement based on Academic Motivation. Kuwait Chapter of Arabian Journal of Business and Management Review 4, (1) 210-215

27. Koenig, H. G., McCullough, M. E., & Larson, D. B. (2001). Handbook of Religion and Health. Oxford University Press.

28. Luszczynska, A. & Schwarzer, R. (2005). Social Cognitive Theory. In M. Conner, & P. Norman (Eds.), Predicting Health Behaviour (2nd Ed., pp. 127-169). Buckingham, UK Open University Press.

29. Maddux, J. E. (1995). Self-efficacy theory: An introduction. In J. E. Maddux (Ed.), Self-efficacy, adaptation, and adjustment: Theory, research, and application (pp. 3–33). Plenum Press.

30. McCullough, M. E., Worthington, E. L., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. Journal of Personality and Social Psychology, 73(2), 321–33

31. Murdock, T. B. & Miller, A. (2003). Teachers as sources of middle school students' motivational identity: variable-centered and person-

centered analytic approaches. The Elementary School Journal, 103(4), 383–399.

32. Odedokun, S.A. (2020). Determinants of academic resilience among medical students of Obafemi Awolowo University Ile Ife Osun State. Nigerian Journal of Applied Psychology 22, 247-274.

33. Ome, B. N., Okorie, N. A., & Azubuike, E. E. (2014). Assertiveness, self-esteem and locus of control as predictors of aggression in a Nigerian sample. International Journal of Research in Arts and Social Sciences, 7(2), 217-229.

34. Onete, O.U., Edet, P.B., Udey, F.U., & Ogbor, B.P. (2012). Academic Performance: A Function of Achievement Motivation Among Education Students of Cross River University of Technology, Calabar. Review of Higher Education in Africa, 4, 63-83.

35. Onukwufor, J. N. (2013). Physical and verbal aggression among adolescent secondary school students in Rivers State of Nigeria. International Journal of Education, Learning and Development, 1 :(2), 73-84.

36. Rachel, R., Jonathan, S. G., & Kristina, D. (2015.). Is Parental Support or Parental Involvement More Important for Adolescents? Undergraduate Journal of Psychology. 28, 1 -8.

37. Richardson, S. A. (2009). Principal's perceptions of parental involvement in the "Big 8" urban districts of Ohio. Research in the Schools, 16 (1), 1-12.

38. Robbins, R. J. (1994). An assessment of perceptions of parental autonomy support and control: Child and parent correlates. Unpublished Doctoral Dissertation, Department of Psychology, University of Rochester, New York.

39. Roeser, R. & Eccles, J. (1998). Adolescents' Perceptions of Middle School: Relation to Longitudinal Changes in Academic and Psychological Adjustment. Journal of Research on Adolescence. 88. 123-158.

40. Sander, P. & Sanders, L. (2003). Measuring confidence in academic study: A summary report. Electronic Journal of Research in Educational Psychology and Psychopedagogy 1, 1-17.

41. Sander, P. & Sander, L. (2005). Giving presentation: the impact on students' perception. Psychological Learning and Technology, 11 (1), 25-41.

42. Sander, P. & Sanders, L. (2004). Understanding academic confidence, The British Psychological Society, 1 (12), 29-4.

43. Sander, P. & Sanders, L. (2006). Understanding academic confidence. Psychology Teaching Review 12, No. 1: 29–39

44. Sanders, M.G. & Sheldon, S. B. (2009). Principals matter: A guide to school, family, and community partnerships. Corwin: A SAGE Company. Sheldon, S. B. 2009. In School, Family, and Community Partnerships: Your handbook for action (3rd Ed.). USA: Corwin Press.

45. Scheel, M., Madabhushi, S., & Backhaus, A. (2009). The academic motivation of at-risk students in a counseling prevention program. Counselling Psychologist, 37(8), 1147-1178.

46. Schneider, L. (2007) 'Perceived stress among engineering students', St. Lawrence Section Conference, Toronto, Canada [online] https://www.asee.org/documents/sections/st-lawrence/ 2007/Schneider-2007-Student-perceived-stress.pdf (accessed 14 August 2016).

47. Sheldon, S. B. (2009). In School, family, and community partnerships: Your handbook for   action. (3rd ed.). USA: Corwin Press.

48. Shoemaker, D. J. (2010). Theories of delinquency: An examination of explanations delinquent behaviour. Oxford University Press.

49. Simons, K.J., Paternite, C.E., & Shore, C. (2001). Quality of parent–adolescent attachment and   aggression in young adolescents. Journal of Early Adolescence. 21:182–203

50. Singh, K., Granville, M., & Dika, S. (2002). Mathematics and Science Achievement: Effects of Motivation, Interest, and Academic Engagement. Journal of Educational Research. 95, 323-332.

51. Smith, T. B., McCullough, M. E., & Poll. J. (2003). Religiousness and Depression: Evidence for a Main Effect and the Moderating Influence of Stressful Life Events. Psychological Bulletin, 129, 614-176.

52. Steinmayr, R., Weidinger, A.F., Schwinger, M., & Spinath, B. (2009). The importance of motivation as a predictor of school achievement. Learning and Individual Differences. 19. 80-90.

53. Stevens, T.G. (2005). Self-confidence. Retrieved from http://www.csulb.ed

54. Supe, A.N. (1998). A study of stress in medical student at Seth GS Medical College. Journal of Postgraduate Medicine. 44. 1-6.

55. Terpstra, V. & David, K. (1991). The Cultural Environment of International Business. South-Western Publishing Company, US

56. Unruh, G.G. & Alexander, W.M. (1970). Innovations in Secondary Education. New York: Holt, Reinhart, and Winston, Inc.,

57. Vallerand, R., Pelletier, L., Blais, M., Briére, N., Sénecal, C. & Valliéres, E. (1992). The Academic Motivation Scale: a Measure of Intrinsic, Extrinsic and Amotivation in Education. Educational Psychological Measurement. 52:1003-1014.

58. Vela, R. (2003). The role of emotional intelligence in the academic achievement of first year college students. Unpublished doctoral dissertation, Texas A&M University-Kingsville.

59. Walker, K. & Dixon, V. (2002). Spiritual and academic performance among African college students. Journal of Black Psychology, 28 (2), 107-121.

60. Weihua, F. & Williams, C.T. (2010). The Effects of Parental Involvement on Students' Academic Self-Efficacy, Engagement and Intrinsic Motivation. Educational Psychology, 30: 53-74

61. Williams, T.R., Davis, L.E., Miller, C.J., Saunders, J., & Williams, J.H. (2002). Friends, families and neighborhoods: Understanding academic outcomes of African youth. Urban Education 37 (3), 408-432

62. Wolf, T. M. (1994). Stress, coping and health: Enhancing well-being during medical school. Medical Education. 28, 8-17.

63. World Health Organization (2017). https://www.who.int/news-room/fact-sheets/detail/suicide

64. Zainuddin Yusoff, B. H. (2000). Hubungan KecerdasanEmosidengankepimpinan: Tinjauan Di KalanganPemimpin-PemimpinPelajarUnversitiTeknologi Malaysia, Skudai. Projeck Sarjana Muda. UTM.TidakDiterbitkan.

65. Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), Handbook of self-regulation (pp. 13-39). San Diego, CA: Academic Press.

66. Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. American Educational Research Journal, 45, 166-183.

Etude Diagnostique et Prospective de L'enseignement Primaire en Territoire de Mahagi à L'ère de la Gratuité Effective en République Démocratique du Congo

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Résumé

　　　　L'étude s'est proposé de diagnostiquer le système scolaire du territoire de Mahagi en République Démocratique du Congo (RDC), devant son harmonisation. Le diagnostic révèle qu'il y a des différences significatives entre les chefferies au niveau du taux brut de scolarisation (CV=0,73 > 0,30). Cette différence, génère des déséquilibres quant aux efforts fournis sur l'ensemble du territoire de Mahagi en matière de scolarisation; il s'est avéré également des différences significatives au niveau du taux d'occupation des locaux et de l'encadrement des élèves (0,58>0,30) et non significatives au niveau de la taille d'écoles (CV=0,26 compris entre 0,15 et 0,30). Cependant, le pourcentage d'enseignants qualifiés est de 100% dans toutes les chefferies du territoire de Mahagi y compris le centre justifiant ainsi l'absence de

différence entre les chefferies quant à la qualification des maitres. Pour réduire les disparités retrouvées, l'étude propose, la création de 4197 écoles en territoire de Mahagi dont 250 écoles en Mahagi centre, 144 écoles à Alur djuganda, 1252 écoles à Anghal, 994 écoles à Djukot, 596 écoles à Mukambo, 409 écoles à Panduru, 98 écoles à Wagongo, 57 écoles à Walendu watsi et, 495 écoles à Warpalara.

Mots-clés: Evaluation, carte scolaire, réduction des disparités, gratuité de l'enseignement et diagnostic

Diagnostic and Prospective Study of Primary Education in Mahagi Territory in the Era of Effective Free Education in the Democratic Republic of Congo

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Abstract

The study aims to diagnose the school system of the territory of Mahagi in the Democratic Republic of Congo, in order to harmonize it. The assessment reveals that there are significant differences between the chiefdoms in terms of the gross rate of schooling (CV=0.73 > 0.30) this result, although not significant, shows imbalances in the efforts made throughout the territory of Mahagi in terms of schooling. There were significant differences at the level of the rate of occupation of the premises and supervision of the pupils (0.58>0.30) found and not significant at the level of the school size (0.26 between 0.15 and 0.30). However, the rate of qualified of teachers is 100% in all chiefdoms of Mahagi territory including the center. Hence, no difference between the chiefdoms as to the qualification of the professors is demonstrated. To reduce the found disparities, the study proposes the creation

of 4197 schools in Mahagi territory, including 250 schools in Mahagi center, 144 schools in Alur djuganda, 1252 schools in Anghal, 994 schools in Djukot, 596 schools in Mukambo, 409 schools in Panduru, 98 schools in Wagongo, 57 schools in Walendu watsi and 495 schools in Warpalara.

Keywords: Assessment**,** School map, disparity reduction, free basic education and diagnosis

Introduction

En 1948, l'éducation s'érige en un droit fondamental, lorsque l'Organisation des Nations Unies déclare que « *toute personne a droit à l'éducation* » (Organisation des Nations Unies, 1948). Pour cette déclaration et la conférence mondiale sur l'éducation pour tous, tous les pays devaient admettre que l'éducation est un puissant moteur de la liberté politique et de tout progrès (Mokonzi, 2009; Ziulu et al., 2015 et Kisembo, 2022). Il s'en est suivi la conférence mondiale sur l'éducation à Thaïlande en 1990, le forum mondial sur l'éducation au Sénégal en 2000 et la rencontre d'Incheon (République de Corée du sud) en 20015 qui, dans leur ensemble insistent sur l'éducation pour tous et surtout de qualité vers un développement durable (Unesco, 1990, 2000 et 2015; De Herdt et Kasongo, 2013; Banque mondiale, 2001;Unesco, 1996 et Kantabaze, 2010).

La RDC comme les autres pays au monde, pour arrimer son système éducatif aux aspirations internationales en matière de l'éducation, a fait de l'éducation l'une de ses priorités. Pour s'en convaincre, les articles 43 et 44 de la constitution stipulent tour à tour que « *toute personne a droit à l'éducation. Il y est pourvu par l'enseignement national* » et « *l'éradication de l'analphabétisme est un devoir national, pour la réalisation duquel le Gouvernement doit élaborer un programme spécifique* ». (Assemblée National, 2006).Cet engagement a stimulé la RDC à faire d'importants progrès en termes d'inscription d'enfants à l'école et donc, une amélioration de l'accès à l'enseignement primaire a été enregistré depuis l'année 2010 (SPACE, 2021et Mokonzi, 2012) et cela a doublé voir même triplé avec la mise en œuvre effective de la gratuité de l'enseignement de base en RDC depuis 2018 (Saleh, 2021).

En dépit de ces réalisations positives enregistrées dans le domaine de la scolarisation, plusieurs études ne cessent de décrier les inégalités persistantes et croissantes en matière de l'éducation en RD Congo (Katako, 1987; Mokonzi, 2009 ; Bandombele, 2005;Issoy, 2017 et Vitamara, 2019). Parmi ces auteurs, Katako (1987) explique qu'au Zaïre (actuelle RD Congo) les inégalités en matière de l'éducation s'expriment à tous les niveaux du système éducatif. Au niveau primaire par exemple, il met en évidence que les disparités existaient entre régions et que ces dernières tendaient à s'aggraver

dans le temps. Cet auteur poursuit en soutenant que les régions les plus favorisés sont celles du Kasaï Oriental, de Kinshasa, du bas-Zaïre et de Bandundu. L'Equateur, Haut-Zaïre et Kivu sont défavorisées alors que Shaba et Kasaï Occidentale bénéficient que d'un niveau moyen de scolarisation primaire.

Au-delà des disparités régionales, on note les disparités entre les communautés et les sexes. Plusieurs communautés à l'instar des enya et pygmées restent exclus de l'éducation scolaire. Vitamara (2014) évoque que le peuple enya[1] par exemple, est le peuple le plus défavorisé des autres peuples de la RDC alors que Mokonzi at al. (2012) parlent des pygmées qui, jusque là sont au bas de l'échelle en matière de l'éducation. Pour ce qui est des disparités sexuelles, Bandombele (2005) avance qu'il existe des très fortes disparités entre les sexes en matière de la scolarisation dans la ville de Kisangani en RDC. Ces disparités sont plus en faveur des garçons que des filles. Ainsi, cette situation n'épargne nullement le territoire de Mahagi en province de l'Ituri (RDC).

Signalons que plusieurs efforts sont ménagés à tous les niveaux afin de réduire ces disparités. Ces efforts s'expriment généralement par les mesures que prennent les politiques en faveur de l'éducation. Parmi ces mesures, il y a l'effectivité de la gratuité de l'enseignement de base qui a été rendue possible sur tout le territoire national de la RDC depuis l'année scolaire 2018-2019. A l'aube de deux ans de cette gratuité scolaire, quelle est la situation actuelle de la scolarisation primaire en territoire de Mahagi ? S'il faut l'améliorer, quelle est la carte prospective? Telles sont les questions auxquelles va répondre cette étude.

Objectifs de l'étude

Généralement cette étude se propose d'analyser les conditions de scolarisation au primaire en territoire de Mahagi, au bout de deux ans de la gratuité de l'enseignement de base en RDC.

De manière spécifique, l'étude vise à:
- Diagnostiquer l'expansion et l'offre de l'enseignement en territoire de Mahagi/RDC et;
- Proposer une carte prospective afin d'harmonisation de l'offre de l'éducation dans ledit territoire.

La gratuité de l'enseignement de base en RDC constitue pour cette étude un cadre contextuel dans lequel, elle est menée. En effet, nul n'ignore que ce concept tire son origine de l'Education Pour Tous.

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[1] Peuple habitant la rive gauche du fleuve Congo, dans la ville de Kisangani en République Démocratique du Congo. Ils sont majoritairement des pêcheurs. Il fait partie des peuples sous scolarisés de la République Démocratique du Congo à l'instar des pygmées.

De l'Education Pour Tous à la gratuité effective de l'enseignement de base en RDC

Tout est partie de la déclaration universelle des droits de l'homme de 1948 par les Nations Unies. Quarante ans plus tard, les nations du monde se sont retrouvées au tour d'une table à Jomtien (Thaïlande) pour examiner les avancées en matière de l'éducation. Cet examen a révélé que malgré les efforts considérables consentis et déployés par les pays du monde entier pour garantir ce droit de tous à l'éducation, la réalité était alarmante (Unesco, 1990). Il se fait remarquer pendant cette conférence mondiale que plus de 100 millions d'enfants, dont au moins 60 millions de filles n'avaient pas accès à l'enseignement primaire, plus de 960 millions d'adultes, dont deux tiers de femmes sont analphabète et cela concernaient tous les pays, tant industrialisés qu'en développement, plus du tiers des adultes du monde n'ont pas accès aux savoir imprimé, aux nouveaux savoir-faire et aux technologies qui pourraient améliorer la qualité de leur vie et les aider à façonner le changement social, culturel et à s'y adapter et plus de 100 millions d'enfants et d'innombrables adultes n'achèvent pas le cycle éducatif de base qu'ils ont entamé, alors que des millions d'autres le poursuivent jusqu'à son terme sans acquérir les niveaux des connaissances et des compétences indispensables (Unesco, 1990). Pour ce faire, la communauté internationale a institué la décennie 90, une décennie de l'Education Pour Tous (Mokonzi, 2017).

Dix ans après soit à 2000, un forum mondial sur l'éducation sera convoqué à Dakar (Sénégal) avec comme souci de faire un bilan mondial de l'Education Pour Tous. Cette rencontre a dévoilé que des progrès importants ont été accomplis dans beaucoup de pays au monde. Cependant, comme le note le cadre d'action de Dakar, il s'est avéré inacceptable, à l'an 2000, que plus de 113 millions d'enfants n'aient pas encore accès à l'enseignement primaire,880 adultes soient analphabètes, que la discrimination sexuelle continue de sévir dans les systèmes éducatifs et que la qualité de l'apprentissage et l'acquisition des valeurs humaines et de compétences soient loin de répondre aux aspirations et aux besoins des individus et des sociétés (Unesco, 2000). Il va sans dire qu'à moins d'un progrès accéléré de l'Education Pour Tous, les objectifs internationaux et nationaux pour réduire la pauvreté ne seront pas atteints et les inégalités entre les pays et au sein des sociétés iront s'aggravant (Unesco, 2000). D'où, il a fallu un engagement collectif en faveur de l'Education Pour Tous.

Pour réussir cet engagement, les participants au forum mondial de Dakar se sont fixé six objectifs. Ces objectifs réitéraient davantage sur l'Education Pour Tous en invoquent cette fois-ci, le caractère obligatoire et la gratuité de l'enseignement de base. Pour s'accommoder à cet engagement international en faveur de l'éducation, la RDC doit consigner le caractère obligatoire et la gratuité de l'enseignement dans sa constitution, loi

fondamentale du pays (Assemblée Nationale, 2006). Bien que reconnus dans la constitution comme avance Mokonzi(2012), aucune action concrète n'a été entreprise par les autorités politiques. Si ce n'est que le 30 Aout 2010 que le l'Etat va charger le gouvernement de prendre toutes les dispositions nécessaires pour rendre effective la gratuité de l'enseignement dès l'année scolaire 2010-2011 dans les établissements publics de l'Etat. Instaurée dans la précipitation, sans bien définir le contour, la gratuité ne faisait que balbutier en RDC. En 2019, pour concrétiser ses promesses lors de ses campagnes électorales, l'Etat va décider de rendre effective la gratuité de l'enseignement de base sur toute l'étendue du territoire national. Les préalables n'étant pas toujours réunis, l'application de la gratuité va engendrer plusieurs maux[2] dans le secteur de l'éducation. Qu'à cela ne tienne, un sentiment de soulagement a été constaté chez les parents des enfants congolais et des avancées importantes pour ce qui est de l'accès à l'éducation ont été enregistrées en RDC depuis 2019.

Approche méthodologique
Collecte des données
        Les données de cette étude se rapportent aux statistiques démographiques et scolaires de l'ensemble du territoire de Mahagi, en province de l'Ituri (RD Congo). Ces données ont été recueillies dans les rapports annuels des sous divisions scolaires de la Province éducationnelle de l'Ituri2 et aux bureaux des chefferies composants ledit territoire. Pour ce qui est des données scolaires, nous nous sommes servis des données de l'année scolaire 2020-2021, la deuxième année d'application effective des mesures de la gratuité de l'enseignement de base en RD Congo. Et, les données démographiques ont concernées tous les enfants nés entre 2009 et 2015(enfants scolarisables) ainsi que toutes les populations telles que présentées par les statistiques territoriales de 2021.

Analyse des données
        Nous avons, pour analyser les données de cette étude, emprunté la technique de la carte scolaire qui, selon Fournier (1971) dans son aspect statique, est la répartition des établissements d'enseignement à travers les différentes entités géographiques et sur le plan dynamique, une proposition des réaménagements d'implantation des écoles pour leur harmonisation.
        Pour ce faire, nous avons eu recours aux indicateurs du niveau d'expansion du système scolaire (Taux brut de scolarisation et indice de

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[2]Incompatibilité entre l'offre et la demande de l'éducation, dégradation du social des enseignants et des conditions de scolarisation des enfants, déchéance de la qualité de l'enseignement à tous les niveaux du système scolaire, etc.

représentation relative), des ressources consacrées à l'éducation (Taux d'occupation des locaux, taille d'écoles et taux d'encadrement des élèves), l'indice de sélectivité différentielle et le coefficient de variation au niveau de la carte diagnostique. La carte prospective a servi comme technique pour réduire les disparités observées.

Le coefficient de variation (CV) a été utilisé dans cette étude pour apprécier la variation de certains indicateurs entre les différentes chefferies du territoire de Mahagi. Cet indice est calculé en prenant l'écart-type sur la moyenne. Il est autrement appelé dispersion relative contrairement à l'écart-type qui est une dispersion absolue. Trois manières sont retenues pour l'interpréter:

- Lorsqu'il est supérieur à 0,30, il exprime la forte différence entre les chefferies;
- Lorsqu'il est compris entre 0,15 et 0,30 ce que les différences sont modérées entre entités considérées et;
- Le CV inférieur à 0,15 explique les faibles différences entre chefferies comparées.

Résultats
Diagnostic du système scolaire du territoire de Mahagi

Le diagnostic du système scolaire du territoire de Mahagi suit deux types d'indicateurs tels que repris dans la typologie selon Gabriel Carron et Tangoc Chaû (1981), dont les indicateurs du niveau d'expansion du système et des ressources consacrées à l'éducation.

Analyse de l'expansion du système

A ce niveau, nous avons retenu deux indicateurs afin de diagnostic de l'expansion du système scolaire du territoire de Mahagi. Il s'agit notamment du taux brut de scolarisation et de l'indice de représentation relative des chefferies.

Taux brut de scolarisation par chefferie

La manipulation des effectifs des enfants scolarisables et scolarisés en territoire de Mahagi par chefferies composantes a permis de calculer le taux brut de scolarisation (TBS) à l'année scolaire 2020-2021, deuxième année depuis que la gratuité de l'enseignement de base soit effective en RD Congo.

Tableau 1. Taux brut de scolarisation (TBS) des enfants par chefferie à l'année 2021

Chefferie	Enfants scolarisables			Enfants scolarisés			TBS		
	G	F	TOT	G	F	TOT	G	F	T
Mahagi centre	209228	191908	401136	23596	20695	44291	11	11	11
Alur Djuganda	125694	128714	254408	9000	8640	17640	7	7	7
Anghal	884247	955830	1840077	13689	10329	24018	2	1	1
Djukoth	686064	726913	1412977	19196	17953	37149	3	2	3
Mukambo	427460	452985	880445	17225	14575	31800	4	3	4
Panduru	304954	328230	633184	18738	18285	37023	6	6	6
Wagongo	79995	82788	162783	5230	3770	9000	7	5	6
Walendu watsi	62827	75325	138152	15530	7024	22554	25	9	16
Warpalara	376946	383768	760714	13224	9499	22723	4	2	3
Territoire	**3077420**	**3243673**	**6321093**	**130198**	**107000**	**237198**	**4**	**3**	**4**
CV									**0,73**

Légende:

G : Garçon, **F** : Fille, **TOT** : Total, **CV** : Coefficient de variation et **TBS** : Taux brut de scolarisation.

La lecture de ce tableau montre que pour l'ensemble du territoire de Mahagi, le TBS est ventilé entre 16% et 1%. La chefferie de Walendu Watsi prend le dessus avec 16% suivie de Mahagi centre avec 11% et au bas de l'échelle, on retrouve la chefferie d'Anghal dont la scolarisation est de 1%. Le coefficient de variation s'est avéré élevé (CV=0,73>0,30), ce qui traduit des fortes disparités entre les chefferies en matière de scolarisation en territoire de Mahagi.
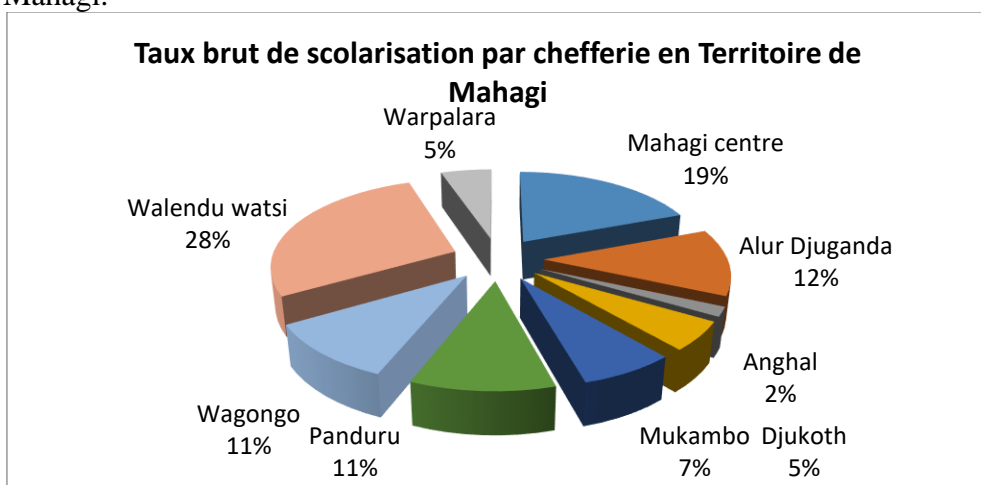

Figure 1. Taux brut de scolarisation par chefferie en territoire de Mahagi

Dans le territoire de Mahagi, la chefferie de Walendu Watsi s'est avérée plus scolarisée, représentant ainsi 28% d'enfants scolarisés sur l'ensemble du territoire suivi de Mahagi centre (19%), Alur Djuganda (12%), Wagongo et Panduru (11%), Mukambo (7%), Djukoth et Warpalara (5%) et en fin Anghal qui ne représente que 2%.

Indice de représentation relative des chefferies (IRR)

Tableau 2. Indice de représentation par chefferie

Chefferie	Pop totale	% Pop totale	Pop scolarisée	%Pop scolarisée	I.R.R
Mahagi centre	141001	11,70	44291	18,67	1,60
Alur Djuganda	3733	0,31	17640	7,44	24,00
Anghal	336206	27,91	24018	10,13	0,36
Djukoth	144962	12,03	37149	15,66	1,30
Mukambo	36794	3,05	31800	13,41	4,39
Panduru	420721	34,93	37023	15,61	0,45
Wagongo	1635	0,14	9000	3,79	27,96
Walendu watsi	194	0,02	22554	9,51	590,43
Warpalara	119390	9,91	22723	9,58	0,97
Territoire	**1204636**		**237198**		

Il ressort de ce tableau qu'il y a un déséquilibre entre les chefferies par rapport aux efforts fournis en faveur de la scolarisation dans l'ensemble du territoire de Mahagi. Les chefferies les plus scolarisées sont la cité de Mahagi[3], Djuganda, Djukoth, Walendu watsi, Wagongo, Mukambo et Panduru (IRR>1) et les moins scolarisées sont entre autre, Agnhal, Panduru et Warpalara dont les IRR sont inférieurs à 1.

Analyse des ressources consacrées à l'éducation

Au vu des données qui nous ont été disponibles, nos analyses se sont intéressées uniquement aux ressources matérielles et humaines.

Ressources matérielles

Le taux d'occupation des locaux et la taille d'écoles sont des indicateurs auxquels nous avons recouru pour diagnostiquer la répartition des ressources matérielles consacrées à l'éducation sur l'ensemble du territoire de Mahagi.

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[3] Mahagi centre est le chef lieu du territoire de Mahagi, il est aussi appelé '***cité de Mahagi'***

Taux d'occupation des locaux (TOL)

Tableau 3. Taux d'occupation des locaux par chefferie

Chefferie	N/élèves	N/classes	TOL
Mahagi centre	44291	324	137
Alur Djuganda	17640	294	60
Anghal	24018	1088	22
Djukoth	37149	809	46
Mukambo	31800	732	43
Panduru	37023	766	48
Wagongo	9000	150	60
Walendu watsi	22554	461	49
Warpalara	22723	562	40
Territoire	**237198**	**5036**	47
C.V			**0,58**

Il s'avère de ce tableau que les taux d'occupation des locaux dans le territoire de Mahagi est de:
- 137 élèves par classe dans la cité de Mahagi;
- 60 élèves par classe dans la chefferie d'Alur Djuganda;
- 22 élèves par classe dans la chefferie d'Anghal ;
- 46 élèves par classe dans la chefferie de Djukoth ;
- 43 élèves par classe dans la chefferie de Mukambo;
- 48 élèves par classe dans la chefferie de Panduru;
- 60 élèves par classe dans la chefferie de Wagongo
- 49 élèves par classe dans la chefferie dans les chefferies de Walendu Watsi et Warpalara;
- 40 élèves par classe dans la chefferie de Warpalara.

La cité de Mahagi a un taux d'occupation des locaux élevé suivie d'Alur Djuganda et de Warpalara. Seul la chefferie des Anghals a un taux d'occupation des locaux de moins de 23 élèves par classe, le minimum fixé par la loi-cadre de l'enseignement en RD Congo. Pour ce qui est des autres chefferies de ce territoire, le TOL varie entre 40 ET 48 élèves par classe.

Le calcul du coefficient de variation révèle des fortes disparités entre les chefferies du territoire de Mahagi quant au taux d'occupation des locaux (C.V= 0,58 > 0,30)

Taille d'écoles par nombre de classes

La taille d'école s'obtient par le nombre des classes sur le nombre d'écoles implantées dans l'entité. Ainsi, dans le cadre de cette étude, l'analyse des données nous révèle les résultats ci-après :

Tableau 4. Taille d'école par chefferie

| Chefferie	N/Ecoles	N/Classe	Taille d'écoles
Mahagi centre	54	324	6
Alur Djuganda	49	294	6
Anghal	142	1088	8
Djukoth	76	809	11
Mukambo	71	732	10
Panduru	71	766	11
Wagongo	25	150	6
Walendu watsi	48	461	10
Warpalara	81	562	7
Territoire	**592**	**5036**	9
C.V			**0,26**

Le tableau 4 indique que la taille d'écoles est de:
- 6 classes par école à Mahagi centre, dans la chefferie d'Alur djuganda et de Wagongo;
- 8 classes par école dans la chefferie d'Anghal;
- 11 classes par école dans les chefferies de Djukoth et Panduru;
- 10 classes par école dans les chefferies de Mukambo et de Walendu Watsi;
- 7 classes par école dans la chefferie de Warpalara

Comparativement aux normes nationales en RD Congo, qui fixent la taille d'école à 12 classe au minimum pour une école primaire, aucune chefferie n'a atteint cette norme. Le calcul du coefficient de variation prouve des différences modérées entre chefferies au niveau de la taille de l'école (C.V =0,26 compris entre 0,15 et 0,30).
Cette situation est représentée dans le graphique ci-dessous comme suit:

Figure 2. Taille des écoles par chefferie
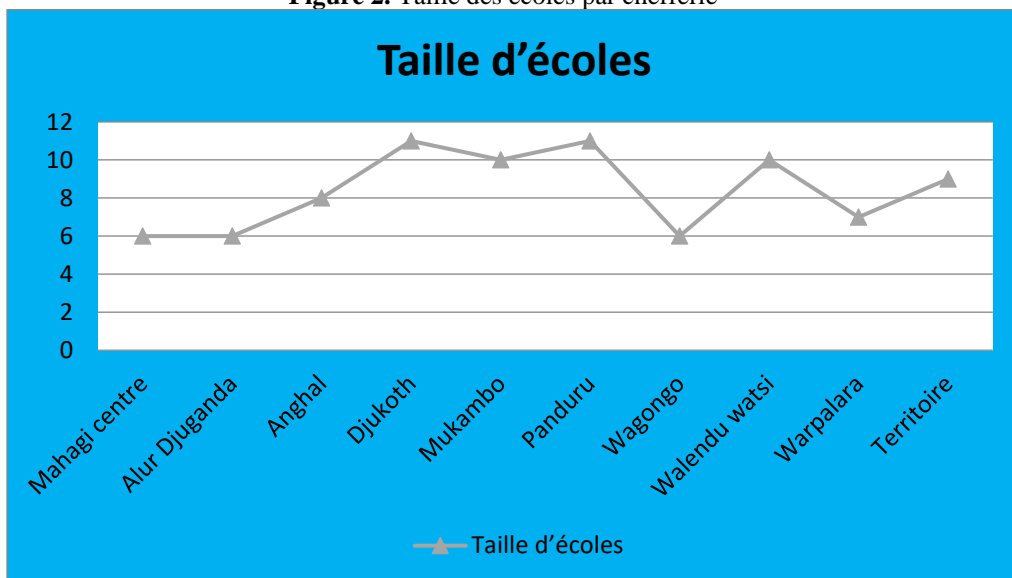
Ressources humaines

Le diagnostic sur la répartition des ressources humaines consacrées à l'éducation dans le territoire de Mahagi a été rendu possible grâce au taux d'encadrement des élèves et de qualification des enseignants. La qualification des enseignants au primaire se définit par l'obtention du diplôme d'Etat en pédagogie. Ainsi, les résultats sont les suivants:

Tableau 5. Taux d'encadrement des élèves et de qualification des enseignants

Chefferie	N/Ecoles	Nombre des Enseignants			TE	TQ
		MQ	MSQ	TOT		
Mahagi centre	44291	324	0	324	137	100
Alur Djuganda	17640	294	0	294	60	100
Anghal	24018	1088	0	1088	22	100
Djukoth	37149	809	0	809	46	100
Mukambo	31800	732	0	732	43	100
Panduru	37023	766	0	766	48	100
Wagongo	9000	150	0	150	60	100
Walendu watsi	22554	461	0	461	49	100
Warpalara	22723	562	0	562	40	100
Territoire	**237198**	**5036**	**0**	**5036**	47	**100**
C.V					0,58	-

Légende: N: Nombre; MQ: Maitres qualifiés; MSQ: Maitres sous qualifiés; TE: Taux d'encadrement et TQ: Taux de qualification

Par rapport au taux d'encadrement des élèves en territoire de Mahagi, il se fait constater que les taux d'encadrement varient entre 22 et 137 élèves par enseignant. A la limite supérieure, on trouve Mahagi centre (137 élèves par enseignant) et à la dernière position, Anghal avec 22 élèves par enseignant. Des fortes disparités se sont observées entre chefferies en matière d'encadrement des élèves dans le territoire de Mahagi (C.V=0,58> 0,30). Pour ce qui est de la qualification des enseignants, le pourcentage des enseignants qualifiés est de 100% sur tout le territoire de Mahagi.

Analyse synthétique des indicateurs

Considérant les réalités scolaires du territoire de Mahagi et surtout de la législation scolaire contenue dans la loi-cadre du 14 février 2014, fixant les normes de fonctionnement des écoles en République Démocratique du Congo, nous avons élaboré ce barème des indicateurs afin d'en construire une échelle de classement des chefferies selon les différents indicateurs calculés.

Barème des indicateurs

Tableau 6. Barème des indicateurs du diagnostic du système scolaire de Mahagi

Indicateurs	TBS	IRR	Taille d'école	TQM	TOL	TE
Note						
5	+ de 60	>à 1,50	12 à 14	>99	40 à 55	40 à 55
4	51-60	1,26 à 150	9 à 11		30 à 39	30 à 39
3	41-50	1,00 à 1,25	6 à 8 et 15 à 20		26 à 29 et 56 à 60	26 à 29 et 56 à 60
2	31-40	0,50 à 0,99	3 à 5		20 à 25 et 61 à 65	20 à 25 et 61 à 65
1	<à 31	<à 0,50	<à 3 et >à 20		Moins de 20 et plus de 65	Moins de 20 et plus de 65

Echelle de classement de différentes chefferies selon les différents indicateurs retenus au diagnostic et calcul de l'indice de sélectivité différentielle (ISD)

Se référent du barème des indicateurs ci-dessus, les scores totaux de chaque chefferie pour tous les indicateurs ont été calculés. Sur base de ces scores, l'indice de sélectivité différentielle dont les résultats sont dans le tableau ci-dessous été également calculés. Cet indice s'obtient par la somme des scores par chefferie sur le score total du territoire.

Tableau 7. Echelle et indice de sélectivité différentielle

Chefferies	TBS	IRR	Taille d'Ecole	TQM	TOL et TE	Total	ISD
Mahagi centre	1	5	1	5	1	13	1,15
Alur Djuganda	1	4	1	5	3	14	1,07
Anghal	1	1	1	5	2	10	1,50
Djukoth	1	3	1	5	5	15	1,00
Mukambo	1	4	1	5	5	16	0,94
Panduru	1	1	1	5	5	13	1,15
Wagongo	1	4	1	5	3	14	1,07
Walendu watsi	1	4	1	5	5	16	0,94
Warpalara	1	2	1	5	5	14	1,07
Territoire	1	3	1	5	5	15	1,00

L'analyse globale de l'état du système scolaire du territoire de Mahagi, démontre que toutes les chefferies de ce territoire, sont plus favorisées que le territoire (ISD >1), exceptés les chefferies de Mukambo et de Walendu Watsi qui, demeurent moins défavorisées par rapport à la situation globale (ISD<1).

En résumé, le diagnostic posé au sein du système scolaire du territoire de Mahagi laisse entendre ce qui suit:
- Des différences significatives entre les chefferies au niveau du taux brut de scolarisation sont observées;
- Ces différences, sont à la base des déséquilibres par rapport aux efforts fournis en faveur de l'éducation, sur l'ensemble du territoire de Mahagi ;
- Il s'est avéré également des différences significatives au niveau du taux d'occupation des locaux et du taux d'encadrement des élèves et non significative pour ce qui est de la taille des écoles;
- Cependant, il n'y a aucune différence au niveau du pourcentage de la qualification des maitres. La qualification des enseignants était de 100% dans toutes les chefferies du territoire de Mahagi y compris le centre de Mahagi.

Les disparités révélées par certains indicateurs du niveau d'expansion du système et ceux des ressources consacrées à l'éducation imposent la recherche des voies et moyens pour les réduire, d'où la nécessité de la carte prospective du système scolaire du territoire de Mahagi.

Carte prospective de l'enseignement primaire du territoire de Mahagi

La préoccupation majeure à présent est la réduction des inégalités scolaires entre les chefferies de Mahagi, à savoir, les voies et moyens de combler les déficits et reconvertir les excédents de scolarisation tels qu'observés dans la carte diagnostique. La carte prospective va nous permettre également de projeter les écoles à créer ou à reconvertir afin de l'effectivité de la gratuité de l'enseignement réussie. Tout ceci, pour éviter une mutation malheureuse: « *de l'école de la médiocrité à la médiocrité de l'école* » au lieu et place « *de l'école de la médiocrité à l'école de l'excellence* » telle que prônée par Mokonzi (2009).

Ainsi, tenant compte des situations observées dans cette entité et des lois (loi-cadre du 14 février 2014, arrêté départemental de novembre 1978) régissant l'enseignement national en RD Congo, nous avons retenu les normes suivantes pour la prospection de la carte scolaire du territoire de Mahagi:

- Le taux de scolarisation minimum de 50%;
- Les taux d'occupation des locaux et d'encadrement au maximum 55 élèves par classe tel que défini dans la loi cadre de 2014;
- La taille d'école de 12 classes par école, norme fixée par l'arrêté départemental de novembre 1978.

Ces normes, nous permettent d'élaborer la carte scolaire suivante:

Tableau 8. Carte scolaire de l'enseignement primaire du territoire de Mahagi

N°	Chefferies	Situation existante							f/à scolariser	Différence à scolariser	Amélioration des situations				Ecoles à créer pour équilibrer				BILAN	
		Pop scolarisable	Pop scolarisée	TBS	N/écoles	N/Classes	Classe/école	Elève/classe			Elèves/classe	Classes/Ecole	N/classe	N/écoles	Elèves/classe	Classes/école	N/classes	N/écoles	Ecoles pour l'ensemble du	Ecole à créer
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Mahagi centre	401136	44291	11	54	324	6	137	200568	156277	55	12	805	67	55	12	2841	237	304	250
2	Alur Djuganda	254408	17640	7	49	294	6	60	127204	109564	55	12	321	27	55	12	1992	166	193	144
3	Anghal	1840077	24018	1	142	1088	8	22	920039	896021	55	12	437	36	55	12	16291	1358	1394	1252
4	Djukoth	1412977	37149	3	76	809	11	46	706489	669340	55	12	675	56	55	12	12170	1014	1070	994
5	Mukambo	880445	31800	4	71	732	10	43	440223	408423	55	12	578	48	55	12	7426	619	667	596
6	Panduru	633184	37023	6	71	766	11	48	316592	279569	55	12	673	56	55	12	5083	424	480	409
7	Wagongo	162783	9000	6	25	150	6	60	81392	72392	55	12	164	14	55	12	1316	110	123	98
8	Walendu watsi	138152	22554	16	48	461	10	49	69076	46522	55	12	410	34	55	12	846	70	105	57
9	Warpalara	760714	22723	3	81	562	7	40	380357	357634	55	12	413	34	55	12	6502	542	576	495
	Territoire	**6321093**	**237198**	**4**	**592**	5036	9	47	**3160547**	2923349	**55**	**12**	4313	359	**55**	**12**	53152	4429	4789	4197

En considérant le seuil minimal de 50% à titre du taux minimal de scolarisation retenu dans cette étude, il ressort que les effectifs à scolariser sont:
- 200568 enfants pour la cité de Mahagi (Mahagi centre);
- 127204 enfants dans la chefferie d'Alur djuganda;
- 920039 enfants dans la chefferie d'Anghal;
- 706489 enfants dans la chefferie de Djukoth;
- 440223 enfants dans la chefferie de Mukambo;
- 316592 enfants dans la chefferie de Panduru;
- 81392 enfants dans la chefferie de Wagongo;
- 69076 enfants dans la chefferie de Walendu watsi;
- 380357 enfants dans la chefferie de Warpalara.

Il sied de noter qu'il y a certains enfants parmi ceux repris ci-haut, qui sont déjà scolarisés, cependant, le territoire de Mahagi ne doit encore ménager aucun effort pour scolariser un surplus de:
- 156277 enfants pour la cité de Mahagi (Mahagi centre);
- 109564 enfants dans la chefferie d'Alur djuganda;
- 896021 enfants dans la chefferie d'Anghal;
- 669340 enfants dans la chefferie de Djukoth;
- 408423 enfants dans la chefferie de Mukambo;
- 279569 enfants dans la chefferie de Panduru;
- 72392 enfants dans la chefferie de Wagongo;
- 46522 enfants dans la chefferie de Walendu watsi;
- 357634 enfants dans la chefferie de Warpalara.

En vue d'améliorer les conditions de scolarisation des enfants déjà dans le système en territoire de Mahagi, proportionnellement aux normes de taille d'école (12 classes par école) et du taux d'occupation des locaux de 55 élèves par classe, les classes et écoles suivantes doivent être organisées:
- 805 classes et 67 écoles en Mahagi centre;
- 321 classes et 27 écoles en Chefferie d'Alur Djuganda;
- 437 classes et 36 écoles en chefferie d'Anghal;
- 675 classes et 56 écoles en chefferie de Jukoth;
- 578 classes et 48 écoles en chefferie de Mukambo;
- 673 classes et 56 écoles en chefferie de Panduru;
- 164 classes et 14 écoles en chefferie de Wagongo;
- 410 classes et 34 écoles en chefferie de Walendu watsi;
- 413 classes et 34 écoles en chefferie de Warpalara.

 Eu égard au surplus à scolariser révélé par cette étude, il est impérieux d'organiser encore:
- 2841 classes et 237 écoles en Mahagi centre;
- 1992 classes et 166 écoles en Chefferie d'Alur Djuganda;

- 16291 classes et 1358 écoles en chefferie d'Anghal;
- 12170 classes et 1014 écoles en chefferie de Jukoth;
- 7426 classes et 619 écoles en chefferie de Mukambo;
- 5083 classes et 424 écoles en chefferie de Panduru;
- 1316 classes et 110 écoles en chefferie de Wagongo;
- 846 classes et 70 écoles en chefferie de Walendu watsi;
- 6502 classes et 542 écoles en chefferie de Warpalara.

Dans le but de réduire sensiblement les inégalités en matière de l'éducation en territoire de Mahagi, les écoles suivantes doivent être ajoutées d'ici 2030 (date cible des ODD), dans les territoires suivants:
- 250 écoles en Mahagi centre;
- 144 écoles à Alur djuganda;
- 1252 écoles à Anghal
- 994 écoles à Djukot
- 596 écoles à Mukambo;
- 409 écoles à Panduru;
- 98 écoles à Wagongo;
- 57 écoles à Walendu watsi et;
- 495 écoles à Warpalara.

Discussion

L'étude révèle qu'il y a des différences significatives entre les chefferies au niveau du taux brut de la scolarisation (CV=0,73>0,30), ce qui traduit des fortes disparités entre les chefferies en matière de scolarisation en territoire de Mahagi. cette différence, est à la base des déséquilibres quant aux efforts fournis sur l'ensemble du territoire de Mahagi en matière de la scolarisation; il s'est avéré également des différences significatives au niveau du taux d'occupation des locaux et d'encadrement des élèves (0,58>0,30) et non significatives au niveau de la taille d'écoles (0,26 compris entre 0,15 et 0,30); cependant, le pourcentage des enseignants qualifiés est de 100% dans toutes les chefferies du territoire de Mahagi y compris le centre, donc, aucune différence entre les chefferies quant à la qualification des maitres. Les chefferies les plus scolarisées sont la cité de Mahagi, Djukoth, Mukambo et Panduru (IRR>1) et les moins scolarisées ou défavorisées sont entre autre, Alur djuganda, Anghal, Wagongo, walendu watsi et Warpalara dont les IRR sont inférieurs à 1.

L'étude met en évidence un besoin urgent de création d'écoles pour réduire ces disparités. Elle propose ainsi la création de 4722 écoles en territoire de Mahagi dont 250 écoles en Mahagi centre, 144 écoles à Alur djuganda, 1252 écoles à Anghal, 994 écoles à Djukot, 596 écoles à Mukambo, 409 écoles à Panduru, 98 écoles à Wagongo, 57 écoles à Walendu watsi et, 495 écoles à Warpalara.

Ces résultats corroborent ceux trouvés par Mbuyamba (1989) à Gécamines-Exploitation, selon lesquels, il faudrait qu'il y ait 11 écoles primaires à la Gécamines-Exploitation, soit 3 au groupe sud, 1 au groupe centre et 7 au groupe ouest. Ce qui explique les inégalités scolaire dans cette entité. Ils rejoignent également les résultats de Katako (1987). Cet auteur dévoile des disparités régionales dans la scolarisation primaire. Selon lui, ces disparités se situent aux trois niveaux: de l'expansion du système, du fonctionnement et des ressources consacrées à l'éducation. Il poursuit en démontrant que ces disparités régionales auraient tendance à se renforcer ou à s'amplifier car, selon son étude, aucune corrélation entre les niveaux atteints en 1974 et la progression en 1974 n'a été négative et significative. Kasaï oriental, Kinshasa, Bas-Zaïre, Kivu et Bandundu étaient favorisées que le Shaba et le Kasaï occidentale et au bas de l'échelle se retrouvait l'Equateur, Haut-Zaïre, où notre étude est menée et Kivu (Katako, 1987).

La gratuité effective de l'enseignement de base est l'une des stratégies efficaces de réduction des inégalités. Avec la gratuité rendue effective depuis 2018, beaucoup d'enfants ont repris le chemin de l'école et la chance est offerte à tout enfant à l'âge scolaire quant à l'accès à l'éducation. En dépit de tout ça, les disparités dénichées aux années 80, au lieu de se réduire, elles s'intensifient. Ce qui signifie, que les disparités ne se réduiront pas seulement en gagnant les effectifs des enfants scolarisés mais aussi et surtout en affectant équitablement les ressources y afférentes. C'est l'idéal de l'état de l'éducation scolaire pour la RD Congo depuis 1960.

Conclusion

Cette étude poursuivait deux objectifs: diagnostiquer l'expansion et l'offre de l'enseignement en territoire de Mahagi/RDC et proposer une carte prospective afin d'harmonisation de l'offre de l'éducation dans ledit territoire. Il s'agissait, en fait, de proposer les pistes de solutions pour une harmonisation des conditions de scolarisation à l'ère de la gratuité effective de l'enseignement de base en RDC.

Au terme de nos analyses, l'étude révèle qu'il y a des différences significatives entre les chefferies au niveau du taux brut de la scolarisation (CV=0,73>0,30). Cette différence, par conséquent, est à la base des déséquilibres quant aux efforts fournis sur l'ensemble du territoire de Mahagi en matière de scolarisation; il s'est avéré également des différences significatives au niveau du taux d'occupation des locaux et d'encadrement des élèves (0,58>0,30) et non significatives au niveau de la taille d'écoles (0,26 l'étendue 0,15 à 0,30); cependant, le pourcentage des enseignants qualifiés est de 100% dans toutes les chefferies du territoire de Mahagi y compris le centre, donc, aucune différence entre les chefferies quant à la qualification des maitres.

Bien que les inégalités en matière de l'éducation ont toujours existées, telles que démontrées par plusieurs chercheurs en planification de l'éducation, en

RDC, les inégalités révélées dans cette étude, sont accentuées par la gratuité effective de l'enseignement de base qui a ouvert évidemment, la porte à plusieurs enfants longtemps privés de l'école. Les conditions n'étant pas réunies pour une gratuité effective de l'enseignement de base efficace, l'école congolaise ne fait que s'enfoncer dans la médiocrité quant à son efficacité quantitative. Préoccupés par l'harmonisation de cette situation, il s'est avéré impérieux de se servir de la carte scolaire.

A la lumière des résultats obtenus, des efforts importants doivent être fournis à tous les niveaux du pays, afin de réduire les disparités. Au-delà de la gratuité effective de l'enseignement de base, l'Etat congolais doit intensifier ses efforts en construisant des écoles et les équiper en fonction des réalités de chaque chefferie composant le territoire de Mahagi. A coté de l'Etat, il y a lieu d'encourager les actions locales allant dans le sens similaire. Sinon la gratuité ne pourra favoriser la scolarisation mais plutôt, l'étouffer et la précipiter davantage vers les iniquités sociales avec des conséquences plus profondes.

Cette étude a sa limite. A sa qualité d'une étude stratégique, elle devrait couvrir toute l'étendue du pays et non un seul territoire sur 145 qui existent. Car, la question de la gratuité n'est pas territoriale moins encore provinciale mais plutôt nationale. Etendre cette étude sur tout le territoire national congolais, serait une façon de doter la RDC d'un phare pour une mise en œuvre effective et idéale de la gratuité de l'enseignement de base telle que prônée par la communauté internationale en pleine quête du développement durable d'ici l'année 2030.

References:
1. Assemblée nationale (2006). Constitution de la République Démocratique du Congo. RDC: Présidence.
2. Bandombele, I.S. (2000). Etude de la disparité dans la scolarisation des filles et des garçons à Kisangani de 1991 à 2001. Mémoire de DES, inédit, FPSE, Kisangani.
3. Coulidiati-Kiélem, J. (2009). Les effets du contexte scolaires sur les performances au collège au Burkina Faso: Analyse multiniveau. Repérée à http://ged.u-bordeaux.fr/ceddt149.pdf.
4. De Herdt, T. &Kasongo, E.M. (2013). La gratuité de l'enseignement primaire en RDC: Attentes et revers de la médaille. Text submits to conference on Human Developpement and Capabilities. Munanga, 9-12 September 2013.
5. Dei, J.S., Mazzuca, J., McIsaac, E. & Zine, J. (1997). Reconstructing « dropout »: A critical ethnography of Back students disengagement from school.Toronto, ON: University of Toronto Press.
6. Diallo, F. (2019). Efficacité interne de l'enseignement primaire au Mali. Acte de conférence internationale. Université de Montréal.

7. Fournier, J. (1971). Politique de l'éducation. Paris : édition du seuil

8. Isidore, M.M. & Bashige, C.B. (2017). Abandons scolaires au Sud-Kivu. Repérée à 10318162/fp.2017.418.

9. Kantabaze, P. (2010). Déperditions scolaires dans le secteur de l'élémentaire au Burundi: Cas de Budjumbura. Thèse. FASTEF: CUSF.

10. Katako, M-K. (1987). Les disparités régionales du système d'enseignement Zaïrois: Etude diagnostique et politique de la planification. Thèse, inédite, Bruxelles: ULB

11. Kisembo, I. M. (2022). Introduction aux Sciences de l'Education. Cours Inédit, FPSE, Bunia.

12. Mbuyamba, M.K., (1989). Analyse de la carte scolaire de l'enseignement primaire de la Gécamines-exploitation. Mémoire inédit. FPSE/UNIKIS.

13. Mokonzi, G. (2005). L'école primaire congolaise et la lutte contre l'analphabétisme. L'école démocratique. Bruxelles : hors série.

14. Mokonzi, G. (2005b). l'éducation pour tous d'ici 2015: quelle chance de réussite pour la République Démocratique du Congo ? Ecole Démocratique. Hors série. 4-8.

15. Mokonzi, G. (2017). Analyse des systèmes éducatifs. Cours inédit. Deuxième licence en Administration et Planification de l'éducation/FPSE/UNIKIS.

16. Mokonzi,G. (2009). De l'école de la médiocrité à l'école de l'excellence au Congo-Kinshasa. Paris : l'Harmattan.

17. SPACE. (2021). Etude sur l'opérationnalisation des stratégies de réduction des abandons scolaires en RDC. Kinshasa: Ministères en charge de l'éducation.

18. UNESCO (2000). Cadre d'action de Dakar: L'Éducation pour tous: tenir nos engagements collectifs. Paris : UNESCO.

19. UNESCO (2000). Forum mondial de l'éducation: Cadre d'action de Dakar. Paris: UNESCO.

20. UNESCO (2000). L'éducation Pour Tous. Objectif numéro un de l'agenda du développement d'ici 2015. Paris: Place de Fontenoy.

21. Unesco, (1990). Conférence internationale de l'éducation: Rapport final. Genève: Unesco.

22. Unesco, (2006). Rapport mondial de suivi sur l'éducation pour tous 2006: Paris: Unesco.

23. Unicef (2000). Enquête nationale sur la situation des enfants et des femmes (MICS2/2001). Rapport synthèse. Kinshasa : Unicef.

24. Vitamara, P. (2005). Scolarisation du peuple enya en République Démocratique du Congo: Etude diagnostique et prospective. Paris : L'Harmattan.

25. Ziulu, E.N., Mokonzi G.B., Vitamara, P.M.& Issoy, A.A. (2015). Conflits armés et évolution de la scolarisation primaire et secondaire en

République Démocratique du Congo de 2005 à 2015. European Scientifc Joural, ESJ, 17(19), 247.

Inventory for Critical Managerial Soft Skills (ICMS) – Development and Standardisation

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Abstract

Purpose: This paper presents the findings of a group of empirical studies for a conceptual and theoretical validation of the Critical Managerial Soft Skills (CMS) Model and then presents the psychometric properties of a newly developed tool - The Inventory for Critical Managerial Soft Skills (ICMS) for assessing the same. **Design/methodology/approach:** The CMS model was validated by a set of qualitative and quantitative studies among employers to confirm the importance of soft skills and to derive the critical soft skills framework (N- 95, 206) and this served as a basis of the tool construction. ICMS has been then psychometrically validated for the group of management graduates by conducting a series of qualitative and quantitative research steps (N-975). **Findings:** ICMS is a self-reported scale for measuring seven critical managerial soft skills of managerial candidates namely, Communication skills, Leadership skills, Interpersonal and Teamwork skills, and Self-Management Skills, Decision-making skills, Goal setting skills, and Task efficacy. **Research limitations/implications:** The tool developed is limited to the measurement of only the seven dimensions which are derived as "critical" based on various stages of the work. **Practical implications:** The tool can be used for recruitment screening and as a pre and post-training assessment tool for soft skills development of management students. **Social**

implications: The tool can be used during management education to help the students understand their levels of soft skills and accordingly suitable measures can be undertaken to improve upon during the course of study to enhance their employability. **Originality/value:** The tool is fully original and has highly useful for researchers and practitioners as it has been empirically validated using appropriate and adequate statistical measures.

Keywords: Soft Skills, Managerial soft skills, Assessment, Psychometric tool, Employability, Management Education, Mixed Methods, Reliability, Validity, Scale development

Introduction

Hiring and retaining the right talent is a crucial factor in the survival and growth of any organization. However, understanding the candidate's competencies and screening them for alignment with organizational goals is still a worry for any hiring manager. Employers and recruiters have clearly and consistently established that they value the "soft skills" of an employee / potential employee during the hiring and retention process. (Luse, 1999; Wardrobe, 2002). Organizations today believe that "soft skills" are the most important ones in an employee /potential employee and all the technical skills can be trained as per requirement (Linkedin 2020; Ibrahim, Boerhannoeddin & Bakare, 2017; McMurtrey et.al 2008; Gallivan, Truex &Kvasny, 2002). Broadly, we can say that "Soft skills" consist of every other skill than the technical skill of a person. Although the soft skills required for various job profiles vary to some degree, certain basic soft skills are considered essential for today's business environment across various sectors (Paadi, 2014; Kyllonen, 2013). Again, there are a lot of differences of opinion about what makes up "soft skills" of managers and management graduates (Chandra &Zakkariya, 2014). The importance of these soft skills and the role of management institutes played in the development of these soft skills for future managers is pertinent because a manager's role is more connected to the 'softer' sides of a person and is also highly relevant in leadership development of any organization (Nida'a, & Worley, 2018).

Despite the importance and relevance of soft skills, we are yet to arrive at a proper soft skills training curriculum and assessment in most of the management degree programs (Morgan & Adams, 2009; Schulz, 2008; Ritter et al, 2018). Developing soft skills through passive or rote learning methods is also not possible. Suitable training methodologies and curricula must be built for the development of soft skills in management graduates, for which a clear framework based on the employer's perspective is collected. This study contributes to the literature in this direction where employers' perspectives on critical managerial soft skills are collected, analyzed, and presented. This

critical managerial soft skills framework can be used as a model for the development of a soft skills curriculum in the future. The next aspect related to soft skills is connected to its assessment. A valid and reliable tool for assessing soft skills could act as a better pointer toward future employee performance and the student is better able to meet the challenges of their work by knowing where they stand (Gibb, 2014). The development of assessment tools for the different soft skills across professional disciplines is also assumed to enhance other aspects of transformational leadership such as coaching and mentoring (Nida'a & Worley 2018). In this background, this paper presents the findings of the two sets of research works leading to the development of a standardized psychometric tool for the assessment of critical managerial soft skills.

Literature review

Managerial soft skills have assumed prime importance ever since business organizations started adopting professional managers in their business. Soft skills are personal attributes that enhance an individual's interactions, job performance and career prospects (Bridgstock 2009, Heckman & Kautz 2012, Treese &Park,2012, Jackson & Wilton 2017, Nusrat & Nas,2018). Several studies have been conducted in this area, especially to reiterate the necessity of these soft skills as an important part of the managerial role. Boyatzis (1982) was among the first to comprehensively describe and study the topic of managerial skills. Using multiple methods to study competencies, including projective tests, job element analysis, and critical incident interviewing, Boyatzis (1982) found evidence for six clusters which include goal and action management, leadership, human resource management, directing subordinates, focus on others, and specialized knowledge. These basic functions of management jobs can be described in terms of planning, organizing, controlling, motivating, and coordinating. These six clusters focus more on the "Soft skills" of managers.

A study was conducted by Nick Wilton (2008) among 1999 Business and Management Graduates in the UK, regarding what they ranked as the most important managerial skill in their first job and what they were taught as important in their business education. It was found that among the list of employability skills surveyed, communication skills, management skills, ability to work in teams and leadership skills were the first four most important skills which they used most in their first job; whereas their business education focused on written communication, research skills, ability to work in teams and basic computer skills as the first four.

According to Schulz (2008), soft skills are commonly divided into two components: personal attributes and interpersonal abilities. Personal attributes refer to attributes such as optimism, common sense, responsibility, a sense of

humour, integrity, time management, and motivation. Interpersonal abilities include empathy, leadership, communication, good manners, and sociability (Schulz, 2008). Datar et al (2010) outlined a similar argument in their book, "Rethinking the Business Education" by using a framework that was originally developed at West Point to describe the essential components of business school education: knowing (or knowledge), doing (or skills), and being (or a sense of purpose and identity). They also found that only a few of the B-schools among the topmost in the world like Stanford and Harvard try to address these issues and provide the students with value-added courses like Critical Analytical thinking, Leadership, Corporate Accountability courses, etc.

Rosenberg, Heimler, & Sofia Morote, (2012) states that "first, students need to understand that to be able to obtain employment in a highly competitive workplace, they need to be prepared with the skills that employers desire. Consequently, it is recommended that regardless of the academic discipline faculty should teach the soft skills that the industry wants and that students need so that graduates gain entry-level employment."

Employers' perspective on Managerial soft skills.

Several studies conducted in various parts of the world tried to collect direct data from employers about their expectations or perspectives on soft skills. Jusoh, Mohd Rizal, & Choy Chong (2007), examined the qualities of fresh graduates in business from the perspectives of employers. Andrews & Helen (2008) tried to conceptualize and identify key individual- and business-related skills and competencies required by employers of business graduates and holders of other higher-level qualifications, and to discover whether business education programs at the higher level are meeting the needs of the European marketplace. Three significant themes emerged out of the research, each one focusing on different components of graduate employability: - Business Specific Issues (Hard business-related knowledge and skills); - Interpersonal Competencies (Soft business-related skills); - Work Experience, and Work-Based Learning. Khain Wye & Mee Lim (2009) led a study and showed that the undergraduates' skills as critical analysis, planning, problem-solving, oral communication, decision making, and negotiating report a slightly higher level of mismatch between employers' and undergraduates' perceptions on their importance and development in the University.

Sharma (2009) surveyed several recruiters to rate the top three soft skills and found that while communication skills were rated as the most important by 72%, teamwork followed a close second with 66% and then time management with 60%. William Hinchliffe & Jolly (2011) presented research in which over 100 employers in East Anglia were asked to record their perceptions of graduates concerning their employability. The findings suggest

a composite and complex graduate identity, depending on employer size and sector. They proposed a four-stranded concept of identity that comprises value, intellect, social engagement, and performance.

Daud, Abidin, Sapuan, & Rajadhurai (2011) investigated the potential gap between important dimensions of business graduates' attributes and the actual performance of these graduates in their post-graduate employment and revealed that managers attach different weights to different aspects of graduates' performance. Razali et.al. (2014) have reported in their research paper "21st Century core soft skills research focus for integrated online project-based collaborative learning model" that the professional graduates of Malaysia are not getting the job as they lack the soft skills required by their employee at the time of their selection process.

In an elaborate mission of imparting, soft skills curriculum by Malaysian Institutions of higher learning, seven soft skills have been defined as most important for graduates. (Ministry of Higher Education Malaysia, 2006). They are Communication Skills (CS), Critical Thinking and Problem Solving (CTPS), Teamwork Skills (TS), Moral & Professional Ethics (EM), Leadership Skills (LS), Lifelong Learning & Information Management Skills (LI), Entrepreneurial Skills (ES). Agrawal (2014), in his Ph.D. thesis has attempted to develop an inclusive listing of what people denote by the term "soft skills" as well as a definition of the same by a systems approach. Based on the study, he has defined soft skills as "are insights – skills – traits –values and virtues that help to deal with the self and others – situations – and communication, work, and organization and finally with Technology –and surroundings"

Assessment of soft skills

Educational assessment is a process of gathering evidence, making judgments, and drawing inferences about student achievement and performance (Curtis, 2010). Pellegrino, Chudowsky, and Glaser (2001) described assessment in the following terms: "An assessment is a tool designed to observe students' behavior and produce data that can be used to draw reasonable inferences about what students know" (Pellegrino, Chudowsky, & Glaser, 2001, p. 42)

Although many institutions are beginning to integrate skill-based education, rigorous skills assessment reflective of the skills being taught has been slower to develop (McConnell & Seybolt, 1991; Riggio, Mayes, & Schleicher, 2003) and it may be because of good reasons. Business schools have excelled at assessing students' abilities and knowledge while doing relatively little in the skills area (Bigelow, 1995). The lack of behavioural change evidence is partly a function of measurement issues. That is, it may be a testament to the difficulties that accompany the assessment and development

of soft skills. Indeed, these skills are not only difficult to measure—they may take a lifetime to master.

Kantrowitz, Tracy's (2005) doctoral thesis was on the development and construct validation of a measure of soft skills performance. In her set of studies ,she examined the dimensionality of soft skills performance, developed measures to assess soft skills performance from self and supervisor perspectives, and validated the measures of performance in a nomological network of non-ability individual differences and existing performance measures.

In a study by Ngang & Chan (2015) aimed to identify critical issues of soft skills development through teaching professional training, they stressed that future research should focus on the appropriate assessment method to facilitate soft skills development. Thousands of literature evidence has been added where the importance of soft skills in the workplace and specifically in management has been established in the past decade. However, not many assessment tools – especially psychometric tools have been standardized in the context. Stephen Gibb (2014) has stressed the need for a theoretical model for the assessment of soft skills.

This paper, therefore, has been completed with the following two objectives. **1. To identify and arrive at a set of "Critical Managerial Soft skills" (CMS) which are necessary for an entry-level management graduate and establish the theoretical model. 2. To develop and validate the psychometric tool for the assessment of the CMS model.** This paper contributes to the contemporary soft skills and management education literature by extracting the dimensions of the critical managerial soft skills by conducting a series of studies to validate the model. The psychometric instrument developed and validated in this paper will also provide organizations with a readymade tool to assess the critical managerial soft skills of candidates during recruitment or training.

Methods

This study is based on Grounded Theory and mixed methods where exploration of the constructs is conducted in different ways like qualitative studies, experts' opinions (face-to-face interaction with experts and telephonic interaction) and content analysis to arrive at a preliminary list of soft skills. Triangulation was ensured to make the resultant set of soft skills coherent. This later underwent a series of quantitative studies to arrive at a comprehensive factor list of soft skills. However, to derive the critical managerial soft skills, the next level of screening by experts was conducted. The resultant parsimonious list was named "Critical Managerial Soft skills". In the next phase, scale construction and scale validation were conducted as per psychometric tool validation processes. The survey design and scale

validation methods used in this study were based on a post-positivistic paradigm (Phillips & Burbules, 2000) that asserts that knowledge is "based on careful observation and measurement of the objective reality that exists 'out there' in the world" (Creswell, 2010) and consider surveys as logical, deterministic, general, parsimonious, and specific (Babbie, 1990) data collection tools that enable statistical analysis with scientific rigor (Creswell, 2005; 2010). Statistical Tools such as SPSS and AMOS were used to ascertain the psychometric properties of the scale. Table I below shows the various steps of qualitative and quantitative research phases and steps along with outcomes for objective one – the Validation of CMS model (Phase One). A total of five different studies conducted one after another led to the derivation of the theoretical validation of the conceptual model of CMS. Figure I shows the Conceptual Model for "Critical Managerial Soft Skills" which was derived in the process of research methods conducted in Phase 1. Table II shows the Phase Two research stages and results for objective two where a series of quantitative research methods were used for the derivation of psychometric properties of ICMS. Each of the Phase's results is discussed in detail under the results and discussion section.

Table I. Research Phases and Steps for Objective One / Phase One

Research Stages	Research Title	Methodology Adopted	Outcomes & Findings
Study One: *(Qualitative and Quantitative methods)*	*Content analysis of current methods of soft skills training and assessment in B-schools* (200 B-Schools Admission Advertisements)	Conducting content analysis by statistical methods, based on the frequency of occurrence of the required parameter	• Important focus areas of the Indian B-schools while offering management programs. • Lack of psychometric assessment tools for assessment of soft skills.
Study Two: *(Qualitative Methods of Interviewing and Conversation Analysis)*	*Literature Review & Expert Discussions*	A total of 15 Subject matter experts were consulted to arrive at "soft skills items"	A list of 156 items that hints "Soft skills" was made.
Study Three:	*Qualitative Survey among employers (95 Samples)*	An open-ended qualitative survey helped in confirming the 156 item list generated which further underwent reductions based on similarity.	A more refined list of 128 items was made based on the content analysis.
Study Four	*Quantitative survey among employers (206 samples)*	The 128 items questionnaire was rated by HR professionals based on their importance using a rating scale of 1-10	Statistical analysis like cluster analysis, exploratory factor analysis, and confirmatory factor analysis led to 14 soft skills factors.

Study Five *(Expert Validation)*	*Derivation of Conceptual Framework for this study*	These 14 factors then underwent further scrutiny by experts to derive "Critical" soft skills and eliminate the "Good to have" skills. This was done to limit the number of factors for the scale construction phase.	A total of 7 soft skills were then finalized as the conceptual model for this study.

Fig 1. Critical Managerial Soft Skills – The Conceptual Model

Table II. Research Stages and outcomes for Objective Two /Phase Two

Research Stages	**Research Title**	**Methodology Adopted**	**Outcomes**
Stage One	*Item Generation*	The items corresponding to the 7 soft skills from the earlier study along with expert discussions	*The item generation meant that each original item was converted to a self-reporting item following rules of psychometric principles.*
Stage Two	*Tool Construction*	The items for each of the seven critical managerial soft skills were designed based on the previous steps findings as well as Subject experts' inputs.	*A total of 67 items were constructed at this phase.*
Stage Three	*Administration Of The Tool*	A sample of fresh Management graduates was invited to participate in the study by answering the test.	*The test administered to a total sample of 875 management students (including 200 in the pilot*

			and remaining in the second level).
Stage Two	*Item Reduction*	A Principal Component Analysis (PCA) is done and the rotated component matrix is derived using IBM SPSS statistics 20 software	*19 items were rejected and a final set of 48 items were finalized at this stage*
Stage Four	*Scale Validation*	Advanced Statistical Analysis (SEM using AMOS) conducted for arriving at psychometric properties	*The final Scale is ready with 37 items. The scale is named as Inventory for Critical Managerial SoftSkills (ICMS)*
Stage Five: Norms	*Norms Setting*	The test was administered to 100 samples (fresh management graduates)	*Norm Values for each subscale are arrived at and presented.*

Results and Discussion
Objective One /Phase one

Phase one of the studies was to come at a theoretical validation of the conceptual model of "Critical Managerial Soft skills" (CMS). This was achieved by conducting a series of five connected studies (as shown in Table I). Study one helped in understanding the relevance of the study and how the concept of "soft skills" of management graduates need to be better defined. A detailed content analysis of advertisements by 200 institutes showed the lack of importance placed by management institutions in using "soft skills" as an advertisement factor for admissions. There was also less than 10% mention of usage of psychometric tools in assessment and training of soft skills. The second study involved a detailed literature review and a derivation of a "first set" of soft skills items. A detailed interview with 15 subject experts on the list enabled at deriving at a 156 item comprehensive soft skills at the workplace which is relevant for a management graduate. The interviews were analyzed using content analysis and conversation analysis methods. Study three was conducted in parallel by sending out a simple open-ended questionnaire to 95 employers asking them to share their views regarding what were the most important soft skills for a management graduate. A content analysis of this survey along with the expert opinion led to the making of a 128 item structured questionnaire. This questionnaire was then sent to a further 206 employers who rated the items based on importance. This dataset further underwent statistical analysis using SPSS and the EFA results derived a 14-factor list of soft skills. However, considering the objective of arriving at a more concise list of factors to enable the psychometric tool construction, it was decided to choose the top-rated seven soft skills only. The 14 factors were also reviewed by experts to make the Content validity index and also to arrive at "critical" and "good to have" factors. This analysis led to the finalization of the seven critical managerial soft skills which again confirmed the CMS model

(Figure 1). The eliminated soft skills factors are also important in the context of the "soft skills" of managers. However, they do not fall into the CMS framework.

Objective Two / Phase Two

In this phase, the construction, item reduction, and validation of the scale for CMS were completed. The research studies as shown in Table II helped in establishing the reliability and validity of the newly developed scale. According to Churchill (1979), specifying the domain of the construct, generating items that exhaust the domain, and purifying the resulting scale should produce a measure that is content or face valid and reliable. The Face validity and Construct Validity of this study is established where the exhaustive list of items was reduced through the processes of EFA and CFA conducted in phase one to arrive at the CMS model. The Model validation and latent structure analysis were performed using CFAs conducted in three different stages established the other validities and also derived the psychometric properties of the scale.

- In stage one, the study conducted individual CFAs for all seven dimensions (e.g., communication skills, decision-making skills, goal setting skills, leadership and initiative skill, self-management skill, task efficiency skill, and team working skills). These individual CFAs were performed mainly to assess the validity of the items covering the respective dimensions. In this stage, the study also eliminated those items with low CFA factor loadings.
- In this second stage, the study conducted an overall CFA model, where all the scale dimensions were allowed to correlate with each other. The major objective of this stage of analysis is to check the validity and reliability of the scale dimensions, specifically convergent and discriminant validity.
- In the third stage, the study checked a model, where we analyzed the second-order CFA model. In this model, the study considered all these seven dimensions as the first-order construct, reflecting the global higher-order construct. In this stage, the study compared this second-order CFA model with the correlated CFA model and analyzed the fit. This stage of analysis helps the study to confirm the latent structure of the proposed scale.

Convergent validity

In this study, we tested the convergent validity of the scale measures using three different measures. The first measure used is CFA factor loadings. It was recommended that if the CFA factor loadings are above 0.50 and loaded high, then it indicates the evidence of convergent validity. Further, another

measure generally used by researchers to confirm the convergent validity is called: Average Variance Extracted (AVE). If the AVE values are above 0.50 it also indicates the convergent validity of the scale measures. Finally, it is also suggested that if the CR values are above 0.50 it also informs the evidence of convergent validity. In the current study, we used all these three measures to check the same.

Discriminant Validity

To examine the discriminant validity the study followed an important discriminant validity check procedure recommended by Hair et al (2010). In this procedure, it is recommended that if the AVE values of the dimensions are greater than the correlation square between the construct pairs it indicates the discriminant validity.

In addition to the aforementioned measures, a variety of goodness-of-fit indices are also available to indicate the adequacy of measured constructs to a model, but there seems to be little consensus on what are the appropriate indices (Hinkin, 1995). Hinkin (1995) noted that the significance of Chi-square was reported most frequently, and the smaller the chi-square value, the better the data fit the model. However, chi-square is very sensitive to sample size, diverse indices have thus been developed for assessing the overall goodness of fit. A ratio of the chi-square value to the degrees of freedom of 5 to 1 was a practical rule of thumb (Hinkin, 1995). Although evaluation of fit indices is somewhat subjective, the higher values, the better the model fit to the empirical data. Besides, Hinkin (1995) reported that other fit indices (e.g., CFI, GFI, TLI, etc.) above 0.85 were considered acceptable. The concept of parsimony serves as a criterion for choosing between several alternative models proposed in the study.

Considering the recommendations of Hair et al. (2010), the study analyzed the goodness of fit of the overall CFA model that is the correlated CFA model. From the analysis, it was observed that the overall correlated CFA model indicated a good fit ($\chi2 = 4334.12$, CFI = 0.90, GFI = 0.90, SRMR = 0.040, RMSEA = 0.050, TLI = 0.92). It also confirms the goodness of fit of the measurement model. All these directed the study that the scale used to measure different dimensions are valid and reliable, therefore, proceed for confirmation of the construct validity.

Besides, the examination of estimated CR values supported that for all dimensions the values were above the suggested cut-off of 0.50. Finally, the examination of AVE values also supported that for all dimensions, the calculated AVE values were above the suggested threshold of 0.50. All these confirmed that the scale measures used to capture different dimensions carrying sufficient convergent validity.

Also, the examination of AVE values with the correlation square between the constructs revealed that in all the cases the calculated AVE values were greater than the pairwise correlations. Thus, the study confirmed the fact the scale measures used to measure different dimensions are divergent or it carries an adequate level of discriminant validity.

In the next stage, the study conducted a CFA, where all the seven dimensions were modelled as the first-order construct. This first-order construct was modelled as the reflection of the higher-order construct. The objective of this stage of analysis is to check the latent structure. This is mainly conducted through the comparison of model fit of the earlier model (correlated model) with the second-order model. As expected, in the second-order model the study received satisfactory goodness of fit indices. The comparison indicated that the second-order CFA model fits well with the data in comparison with the correlated model. Table III provides the comparison of the model fit indices of the second-order model with the correlated model. Hence, the study confirmed that the scale carries a second-order dimensional structure.

Table III. Comparison of the model fit indices

Fit indices	Correlated model	Second-order factor model
χ^2	4334, p < 0.01	**4304, p < 0.01**
χ^2/df	1.66	**1.55**
CFI	.90	**.91**
IFI	.911	**.92**
GFI	.90	**.92**
TLI	.92	**.93**
RMR	.050	**0.46**
SRMR	.040	**0.40**
RMSEA	.050	0.45

Table IV and V give the reports of the Item Reduction and the Reliability and Validity Scores of the Tool.

Table IV. Item Reduction Report

Name of Scales	Original Tool	After EFA	After Independent CFA
Communication skills	10 items	8 items	7 items
Decision making skills	9 items	6 items	4 items
Goal-Setting Skills	5 items	4 items	4 items
Leadership and Initiative skills	11 items	8 items	5 items
Self-Management Skills	8 items	6 items	6 items
Task Efficacy	8 items	6 items	6 items

Interpersonal and Teamwork Skills	16 items	10 items	5 items
Total Inventory	**67 Items**	**48 items**	**37 items**

Table V. Reliability and Validity Scores of Critical Managerial Soft Skills Scales

Scales	Construct Reliability (CR)	Validity Index (AVE Score)
Communication skills	0.78	
		0.767
Decision making skills	0.68	0.785
Goal Setting Skills	0.801	0.835
Leadership and Initiative skills	0.77	
		0.78
Self-Management Skills	0.69	0.776
Task Efficacy	0.691	0.734
Interpersonal and Team work Skills	0.721	0.715
Total Scale		

The naming of the Final Version of the tool

Based on the above statistical results, we finally derive the Inventory for Critical Managerial Soft Skills - the final version. The final tool, therefore, has **37 items and assesses the seven critical managerial soft skills.** The tool is named as "**Inventory for Critical Managerial Soft Skills" and is abbreviated as "ICMS"**. The final version of the tool is presented in **Exhibit 1 as below.**

Exhibit 1. Inventory for critical managerial soft skills (ICMS) –final version

Instructions to candidates: Please select the best response from the below items which you think is true in your case. Kindly do not think for long and put a tick mark for the option that comes first to your mind.

SD- Strongly Disagree	D- Disagree	Neutral	Agree	Strongly Disagree

Sl no	Item	SD	D	N	A	SD
1	I set clear goals for accomplishing my tasks.					
2	I am always ready to take up new projects in our class/workplace					
3	I can take appropriate decisions related to myself or my works					
4	I am mostly pleasant and happy					
5	I can prepare my assignments, reports, records, etc systematically as expected by my faculty/ supervisors/higher authorities					
6	I have a clear understanding of my strengths and weaknesses					

7	I usually take initiative for new projects in our class /workplace					
8	I strive to attain perfection in every job					
9	I maintain a good level of eye contact with the audience while communicating or presenting					
10	I always have a timeframe for attaining my goals.					
11	I can evaluate the consequences while making decisions					
12	I can understand the subtle differences in the performances of others in a team.					
13	I am aware of my limitations.					
14	I follow up with every group member on the status of an assignment regularly					
15	I can understand the difference between big mistakes and small errors.					
16	I consistently follow up on the commitments made by people					
17	I am a confident person					
18	Normally the goals I set are achievable					
19	I collect and analyze all information needed for doing my job effectively.					
20	I train/teach my classmates on tough topics during my free time.					
21	I can influence people to work towards the goals we set.					
22	I am usually enthusiastic while doing all tasks entrusted to me					
23	When a task is assigned to me, I clarify all the resources needed for completing it.					
24	I always express my opinions in a discussion					
25	I am capable of splitting the tasks among group members when I am the group leader.					
26	I always motivate others					
27	I can express my problems to my teachers/faculty when needed					
28	I regularly update myself with the latest information in my field of interest.					
29	I can adjust my body language according to the situation or topic of presentation.					
30	My friends appreciate my decision making capability.					
31	I help others to identify and improve on their weaknesses					
32	I am confident of delivering presentations as part of all jobs assigned to me.					
33	I maintain a "to-do" list or a " plan of action " for any task					
34	People come to me whenever they need a solution for certain problems					
35	I understand and correct any bad gestures I may have while communicating or presenting					
36	I do not set unrealistic goals in my personal or professional life					
37	I try to promote my college/organization among others					

Content Validity Index

Twelve Experts consisted of the following categories were asked to rate each of the items (37 items) based on the relevance of the items towards the scale and Clarity of Items towards the scale. The Content Validity Index (CVI) scores are considered to be high if the scores are above 0.7. If any of the scales or items possessed a CVI score below 0.50, it shall be rejected. In

the case of ICMS, the CVI analysis has given substantially high scores for the scales and hence the Content Validity for the tool is established.

Derivation of Norm Values

Any standardized psychometric tool shall be accompanied by norm values to effectively administer them. Accordingly, one more final data collection was attempted. This time, the ICMS Final version was administered to a group of 100 Management graduates and the scores were tabulated as following to arrive at the final norm values. (Table VI)

Table VI. Consolidated Norm Table For A Sample Of 100 Management Graduates

SL NO	Scale Name	MEAN VALUE	TOTAL SCORE POSSIBLE	AVERAGE SCORE
1	Communication Skills	4.40715	40	35.31
2	Decision Making Skills	4.2913	25	21.35
3	Goal setting Skills	3.3624	20	12.34
4	Leadership Skills And Initiative	4.36	25	21.8
5	Self-Management Skills	4.4157	35	31.03
6	Task Efficacy	4.306	30	25.9
7	Interpersonal and Teamwork Skills	4.305	20	17.5

Design of Answer Key and Score Interpretation for ICMS

The norm values that we derived are used to design a Scoring Key for the ICMS final version. The answer key will enable a test administrator to score the items and compare with the norm values for interpretation and provide suitable advice/intervention for the candidate. The ICMS Scoring Key is shown in **Exhibit 2.**

EXHIBIT 2: ICMS SCORING KEY

Instructions to Test Administrator

The Inventory for Critical Managerial Soft Skills (ICMS) is used to assess the critical managerial soft skills of a candidate. The tool is a self-rating standardized psychometric tool and shall be administered to understand the status of critical managerial soft skills of a candidate. The critical managerial soft skills assessed in this tool are the following.

Communication Skills: This stands for the set of skills which helps a candidate to communicate for professional purposes using oral skills - which includes interpersonal communication, presentation skills, and writing skills in the form of reports or official documents

Leadership Skills: This stands for a set of skills which enables a candidate to take leadership roles, take initiative and responsibility related to the task at hand

Interpersonal and Teamwork skills: This stands for skills that are crucial for creating and maintaining a cordial relationship with colleagues and superiors.

Self–Management Skills: This stands for the level of awareness about self; including their perception of the individual's strengths and weaknesses.

Goal Setting skills: This stands for the candidate's capability to understand and articulate long term and short term goals which is important at work

Decision-Making Skills: This stands for those skills which enable the capability to solve problems and to take suitable decisions as per the need of the organization/situation.

Task Efficacy: This stands for the candidate's capability to deliver results and task completion as per mandates.

SCORING METHOD

The tool is designed on LIKERT SCALE for agreeableness. The Scoring is done in the following manner

Strongly Disagree   - 1 point
Disagree   - 2 points
Neither Agree nor Disagree   - 3 points
Agree   - 4 Points
Strongly Agree   - 5 Points

Each of the items is scored points as per the candidate's response. The items corresponding to each of the scales are given in the ICMS Norm Table below. The Norm Values are also listed in the same table.

ICMS Norm Table

SCALE	Items under the scale	Norm Value for 22- 30)
Communication Skills	Item numbers 5 , 9, 19, 24, 27,29, 32 , 35	Norm Value: 35.
Decision Making Skills	Item Numbers 3, 11, 15, 30	Norm Value: 17.
Goal Setting Skills	Item numbers 1,10, 18, 36	Norm Value : 12
Leadership Skills & Initiative	Item Numbers 2,7, 14, 21 , 26	Norm Value: 21.
Self - Management Skills	Item numbers 4,6,13,17,22, 28	Norm Value: 26.
Task Efficacy	Item numbers 8,16,23, 33,34, 37	Norm Value: 25.
Interpersonal and Teamwork Skills	Item numbers 12,20,25,31	Norm Value: 17.

SCORE INTERPRETATIONS

Based on the norm values, the administrator can guide the candidate on specific areas of soft skills improvement.

SCALE	SCORE VALUE	INTERPRETATION
Communication Skills	Below 33	Low
	34- 36	Average
	36 -39	High
	40	Overconfident
Decision Making Skills	Below 15	Low
	16-18	Average
	19	High
	20	Over Confident
Goal-Setting Skills	Below 11	Low
	12-14	Average
	15-18	High
	19-20	Over Confident

Leadership Skills &	Below 20	Low
	21-22	Average
	23-24	High
	25	Overconfident
Self - Management Skills	Below 25	Low
	26-27	Average
	28-29	High
	30	Overconfident
Task Efficacy	Below 25	Low
	25-27	Average
	27-29	High
	30	Overconfident
Interpersonal and	Below 16	Low
	17-18	Average
	18-19	High
	20	Over Confident

Implications and Future research areas

This study agrees to several previous studies in the field of employer's perception of soft skills (Andrews & Helen (2008), Kantrowtiz (2005), Khain Wye & Mee Lim (2009, William Hinchliffe & Jolly (2011), Daud, Abidin, Sapuan, & Rajadhurai (2011), LaPrince (2013), Nianeni et al (2019) to name a few) where it has been found that "soft skills" and its various dimensions contribute to the graduates' effectiveness at a job. In a very recent paper by Dubey & Tiwari (2019), for the operationalization of soft skills attributes and determining the existing gap in novice ICT professionals, the six soft skill factors identified as Personal skill, Leadership, interpersonal skill, team skill, organization skill, and enterprising skill. The ICMS confirms with this study as some of the skills identified as important in this study are the same as the CMS framework. But it differs from some others as enterprising skill and communication skills.

This study also corroborates a very recent research study by Ricchiardi & Emanuel (2018) conducted at the University of Turin which has introduced a theoretical and methodological reflection about soft skills assessment and development in its students, through the Passport.Unito Project. This project uses a model of 12 soft skills area of a task (problem-solving and decision making, time and space management, adoption of strategies adequate in tackling the task); area of the self (self-enhancement, emotional self-regulation, enterprise); motivational area (goal orientation, causal attribution, resilience); area of the interpersonal relationships (teamwork, communication, conflict management). They also presented the psychometric properties of the

Passport.Test which a self-assessment tool for the above soft skills. The ICMS tool differs from the fact that this is designed specifically for the critical managerial soft skills and not for all graduates. However the seven soft skills identified can be equally applicable for all graduates as well. The factors used in Passport.Test like Problem-solving and decision making, self-enhancement, goal orientation, teamwork, and communication are some of the key soft skills measured by ICMS as well. A detailed study on the concurrent validity of ICMS with Passport.Test can be attempted in the future.

More studies on the various remaining dimensions apart from these seven critical managerial soft skills presents a vast research scope. Research in any area is substantially enhanced by the ability to measure a construct. The development and validation of the ICMS instrument open the doors for further validation of the instrument. Testing for convergent validity with other constructs in the soft skills inventory/employability and discriminant validity with constructs such as emotional intelligence or workplace performance measures are recommended. Validating the instrument for other cultural contexts should be considered.

Limitations

This work has its limitations just as in any research. Firstly, the ICMS tool assesses only the seven Critical managerial soft skills and cannot be considered as a comprehensive assessment by itself. There could be other soft skills that can be highly relevant to other groups. A test only measures what is made for and hence ICMS measures what it is designed for. Newer models of soft skills assessment especially using technology has still various problems and are yet to arrive at more clarity. Rasipuram & Jayagopi (2020) have reviewed existing methods that use behavior tracking and mapping behavior to perception for assessment of Big five personality, leadership skills, communication skills, and similar soft skills of candidates which employers use during recruitments. They propose that instead of using a single psychometric tool for assessments, employers shall use multiple methods to arrive at a decision. Therefore it is advisable to use the ICMS tool along with other assessment methods as a confirmatory method than as a single method.

In a very recent research study by Tsirkas, Chytiri & Bouranta (2020), it was found that there is a gap between employees' and their subsequent employers' perceptions of employees' soft skills. Employees seem to regard their skills more highly than do their employers, whereas employers seem to consider employees as not properly equipped with the necessary soft skills. These two studies point to the fact that the usage of the ICMS tool shall be done along with other assessment methods.

Hughes (2018) in his seminal book chapter on Psychometric Validation, found that When producing a new psychometric or trying to sell

one, researchers or test publishers can currently make a convoluted, lengthy, and convincing 'validity argument' whilst ignoring consequences completely. He further proposes a new model of including the accuracy and appropriateness of a test. The accuracy of a psychometric can be established through examination of participant response processes, psychometric content, and the structure of psychometric content. Whether it is appropriate to use a psychometric for a given purpose can be established through examination of the relationship between psychometric scores and other variables, the potential or actual consequences of psychometric use, and the practical feasibility of psychometric use. Accordingly, this paper establishes the accuracy of the ICMS Tool in its content and structure but does not establish the response processes and stability across groups. The appropriateness of the tool is established by the presentation of the convergent, discriminant, and concurrent validity measures. However, the measures on the consequences and feasibility are not conducted in the present study.

One another limitation is that it does not arrive at the Predictive Validity of the tool. Predictive validity can be arrived at only with the application of the tool in a longer context and checking various datasets of candidates who perform better at work based on the results of the tool. It has to be understood that predictive validity is validity which is evolved through years of application of the tool and refining the tool. Time-lagged or Longitudinal SEM has to be conducted in the future to arrive at the scores in predictive validity. These are also future areas of research recommended.

Conclusion

The findings of this study provide theoretical and empirical support to the ICMS model through evidence of construct validity, content validity, face validity, reliability, and factor structure reflecting its conceptual foundation. The common themes, depicted in the CMS Model help in narrowing down the most important skills - the foundation skills. This study thereby strengthens the research on soft skills and assessment by providing empirical evidence to the theory-building process in the area of soft skills development and assessment. The study has contributed to the literature on soft skills by confirming the model of critical managerial soft skills as well as providing a standardized tool.

The ICMS is a practical tool for soft skills assessment and can be used as a precursor for personal change and the development of management students and graduates. With the ever-increasing importance of soft skills in the workplace more and more organizations need practical tools and solutions for effective strategies and practices. The critical managerial soft skills framework will enable organizations to understand the phenomenon of soft skills and take a more holistic approach to dealing with individual capabilities.

The tool could also help an individual to plan and analyse their skill development areas. With the development of a multidimensional model of soft skills and a clearer understanding of the various dimensions, there is now an opportunity to further explore the distinct dimensions.

Soft skills – the hitherto elusive set of the phenomenon in the past decade is now getting clarity with the advent of research works in multiple quarters – education, organization, and technology. This study conducted therefore is a pioneering effort in trying to design a psychometric tool for the critical managerial soft skills. To conclude, this is the beginning of more advanced research and possibilities in the area of soft skills assessment.

Acknowledgments

References:
1. Agrawal, A. (2014). Study of Developments and Challenges involved in Soft-skills Training in Professional Colleges. India: University of Rajasthan
2. Andrews, J., & Helen, H. (2008). Graduate Employability, 'Soft Skills' Versus 'Hard' Business Knowledge: A European Study. *Higher Education in Europe*, 33 (4), 411-422.
3. Babbie, E., 1990. *Survey Research Methods*. Belmont, CA: Wadsworth, Inc
4. Bigelow, J.D. (1995). Teaching managerial skills: A critique and future directions. *Journal of Management Education*, **19**, 305-325.
5. Boyatzis, R.E., (1982). *The competent manager: A model for effective performance*. John Wiley & Sons.
6. Bridgstock, R., (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, *28*(1), pp.31-44.
7. Creswell, J. W., & Creswell, J. D. (2005). Mixed methods research: Developments, debates, and dilemmas. *Research in organizations: Foundations and methods of inquiry*, 315-326.
8. Creswell, J. W. (2010). Mapping the developing landscape of mixed methods research. *SAGE handbook of mixed methods in social & behavioural research*, *2*, 45-68.
9. Churchill, G. A.(1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16, 64–73

10. Curtis, D.D., (2010). Teaching, learning, and assessment in TVET: The case for an ecology of assessment. *SEAVERN Journals*, *2*(1).

11. Daud, S., Abidin, N., Sapuan, N. M., & Rajadhurai, J. (2011). Enhancing university business curriculum using an importance-performance approach: A case study of the business management faculty of a university in Malaysia. *International Journal of Educational Management, Vol. 25 Iss: 6*, 545 - 569.

12. Datar, Srikant M. et al (2011), Rethinking the MBA: business education at a crossroads. *Journal of Management Development*, Vol. 30 Iss: 5 pp. 451 – 462

13. Dubey, Richa Singh & Tiwari, Vijayshri (2019). Operationalisation of soft skill attributes and determining the existing gap in novice ICT professionals. *International Journal of Information Management*. Volume 50, 2020, Pages 375-386, ISSN 0268-4012, https://doi.org/10.1016/j.ijinfomgt.2019.09.006.

14. Gibb, S., (2014). Soft skills assessment: Theory development and the research agenda. *International journal of lifelong education*, *33*(4), pp.455-471.

15. Gallivan, M., Truex III, D. P., & Kvasny, L. (2002, May). An analysis of the changing demand patterns for information technology professionals. In *Proceedings of the 2002 ACM SIGCPR conference on Computer personnel research* (pp. 1-13).

16. Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Seventh Edition. Upper Saddle River, New Jersey: Prentice-Hall

17. Heckman, J.J., and Kautz, T., (2012). Hard evidence on soft skills. *Labor economics*, *19*(4), pp.451-464.

18. Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21(5), 967-988.

19. Hughes, D. (2018). Psychometric Validity: Establishing the Accuracy and Appropriateness of psychometric measures. In *The Wiley Handbook of Psychometric Testing: A Multidisciplinary Approach to Survey, Scale, and Test Development*. John Wiley & Sons Ltd.

20. Ibrahim, R., Boerhannoeddin, A., & Bakare, K. K. (2017). The effect of soft skills and training methodology on employee performance. *European Journal of Training and Development*.

21. Jackson, D., and Wilton, N., (2017). Perceived employability among undergraduates and the importance of career self-management, work experience, and individual characteristics. *Higher Education Research & Development*, *36*(4), pp.747-762.

22. Jusoh, M., Mohd Rizal, A. R., & Choy Chong, S. (2007). Employers' preference and assessment of the qualities of fresh business graduates:

empirical evidence from Malaysia. *International Journal of Management and Enterprise Development*, DOI: 10.1504/IJMED.2007.012682.

23. Kantrowitz, T. (2005). *Development and Construct Validation of a measure of Soft skills Performance.* Georgia: Georgia Institute of Technology.

24. Khain Wye, C., & Mee Lim, Y. (2009). Perception Differential Between Employers And Undergraduates On The Importance Of Employability Skills. *International Education Studies ISSN 1913-9020*, 95

25. Kyllonen, P. C. (2013).Soft skills for the workplace. *Change: The Magazine of Higher Learning*, *45*(6), 16-23

26. LaPrince, S. L. (2013). *A qualitative exploration of management education: Business school offerings in comparison to employer expectations*. Minnessotta: Capella University.

27. Linkedin Learning (2020). *4th Annual 2020 Workplace Learning Report*, Available at https://learning.linkedin.com/content/dam/me/learning/resources/pdfs/LinkedIn-Learning-2020-Workplace-Learning-Report.pdf

28. Luse, D. (1999). Incorporating business communication in an integrative business seminar. *Business Communication Quarterly*, 62(1), 96-100.

29. Ministry of Higher Education Malaysia. (2006). *Development of soft skills for Institutions of Higher Learning.* Malaysia: Universiti Putra Malaysia

30. McConnell, R.V., and Seybolt, J.W., (1991). Assessment center technology: One approach for integrating and assessing management skills in the business school curriculum. *Managerial skills: Explorations in practical knowledge*, pp.105-115.

31. McMurtrey, M. E., Downey, J. P., Zeltmann, S. M., & Friedman, W. H. (2008). Critical skillsets of entry-level IT professionals: An empirical examination of perceptions from field personnel. *Journal of Information Technology Education: Research*, *7*(1), 101-120.

32. Morgan, G., & Adams, J. (2009). Pedagogy first! making web-technologies work for soft skills development in leadership and management education. *Journal of Interactive Learning Research*, *20*(2), 129-155.

33. Nick Wilton (2008): Business graduates and management jobs: an employability match made in heaven?, *Journal of Education and Work*, 21:2, 143-158

34. Paadi, K. (2014). Perceptions on employability skills necessary to enhance human resource management graduates prospects of securing a relevant place in the labour market. *European Scientific Journal*.

35. Pellegrino, J.W., and Chudowsky, N., (2003). FOCUS ARTICLE: The foundations of assessment. *Measurement: Interdisciplinary Research and Perspectives*, *1*(2), pp.103-148.

36. Phillips, D.C., Phillips, D.C. and Burbules, N.C., (2000). *Postpositivism and educational research*. Rowman & Littlefield.

37. Reich, R. B. (1992). *The work of nations*. New York: Vintage

38. Riggio, R. E., Mayes, B. T., & Schleicher, D. J. (2003). Using assessment center methods for measuring undergraduate business student outcomes. *Journal of Management Inquiry*, 12, 68-79.

39. Rosenberg Stuart, Ronald Heimler, Elsa-Sofia Morote, (2012), Basic employability skills: a triangular design approach, *Education + Training,* Vol. 54 Iss: 1 pp. 7 – 20

40. Ritter, B. A., Small, E. E., Mortimer, J. W., & Doll, J. L. (2018). Designing management curriculum for workplace readiness: Developing students' soft skills. *Journal of Management Education*, *42*(1), 80-103.

41. Chandra Vadhana R. & Zakkariya K.A. (2014). Management Education- Can we bridge the gap? A qualitative study on the Employer's Perception of Soft Skills of Management Graduates. *In Proceedings of the National Seminar on Management Education In India-Changing Role and New Strategies* (pp. 4-12). Ernakulam: MES College, Marampilly

42. Schulz, B. (2008). The importance of soft skills: education beyond academic knowledge. *Nawa (Windhoek, Namibia)*, *2*(1), 146-154.

43. Razali, S. N., Hussin, H., & Shahbodin, F. (2014). 21st century core soft skills research focus for integrated online project-based collaborative learning model. *Journal of Applied Science and Agriculture*, *9*(11), 63-68.

44. Sharma, M., (2009).How Important Are Soft Skills from the Recruiter's Perspective. *ICFAI Journal of Soft Skills*, *3*(2).

45. Naineni, K., Desu, R., Bhat, N. R., Mada, S., Reddy, G. V., Sateesh, S., & Anderson, J. L. (2019). Interns' perceptions of the importance of "soft skills" in clinical practice in India. *Journal of Research in Medical Education & Ethics*, *9*(1), 7-12.

46. Ngang, T.K., and Chan, T.C. (2015). Critical issues of soft skills development in teaching professional training: Educators' perspectives. *Procedia-Social and Behavioral Sciences*, *205*, pp.128-133.

47. Nida'a, K. A., & Worley, J. A. (2018). Leading toward new horizons with soft skills. *On the Horizon*. Emerald Publishing

48. Nusrat, M., & Naz, K. (2018). Soft Skills for Sustainable Employment: Does it really matter? *International Journal Of Management And Economics Invention*, 4(07), 1835-1837. Retrieved from https://doi.org/10.31142/ijmei/v4i7.03

49. Treese, I.M.E. and Park, S.E., (2012). The Development of Soft Skills as an Aid to Job Retention and Advancement. Retrieved from https://pdfs.semanticscholar.org/ef39/77d190b56acbe7e2f9c53584de 45ccbe49ca.pdf

50. Tsirkas, K., Chytiri, A. P., & Bouranta, N. (2020). The gap in soft skills perceptions: a dyadic analysis. *Education + Training*. Retrieved from: https://dora.dmu.ac.uk/handle/2086/19156

51. Wardrope, W. J. (2002). Department chairs' perceptions of the importance of business communication skills. *Business Communication Quarterly*, 65(4), 60-72.

52. Wilton, N. (2008). Business graduates and management jobs: an employability match made in heaven?. *Journal of Education and Work*, *21*(2), 143-158.

53. William Hinchliffe, G., & Jolly, A. (2011). Graduate identity and employability. *British Educational Research Journal*, 563-584.