

Effects of The Socio-Educational Environment On the Performance of the Students of the Grammar Schools of Agboville

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Abstract

This work aims to study the influence of the socio-educational environment on student performance. It seeks to identify the scope of the relationship between variables or dimensions of school climate and academic performance. From 227 students and 36 public and private high school educators and colleges from the city of Agboville, we assessed their perception with the multidimensional assessment scale of student well-being in schools by Guimard et al., (2014). Multivariate regression analysis and cross-tabulations of variables have elucidated the interactions between a person's behaviors, individual characteristics, and the environment in which they evolve. The data collected showed that school performance depends on the feeling of security, the learning conditions, the state of the teacher-student relationship, the overall satisfaction of students and their well-being in the school environment. This study proves that the best academic results of learners are intimately linked to the establishment of a quality socio-educational environment.

Keywords: School environment, well-being, motivation, performance.

Introduction

School climate is the term used today to refer to the quality of life and the daily atmosphere in a school. Studies continue to confirm that it plays an important role in the students' success, and motivation to learn. Thus, they establish a causal chain in which the perceived climate is at the interface of the objective environment and school motivation. Thiébaud (2002) emphasizes that the school climate refers to the quality of life and communication perceived in a school. The school climate is therefore multifactorial and must be seen as the result of a complex process. For Maurice and Montégut (2016), There are several scales that measure the

atmosphere, the ambiance, the climate in a classroom, but it is only the climate in a classroom that plays a very important role in success. Research has shown that the three most important factors for a student to learn are: time spent on task, feedback and retroactive effects received and finally the learning climate.

Indeed, research has made it possible to highlight a strong link between the school climate, the learning quality and academic success. Consequently, positioning oneself in relation to the school climate amounts to addressing fundamental questions linked to “the construction and transmission of knowledge” (Debarbieux et al., 2012). Another aspect of school performance is the ability of a school, not only to achieve but exceed its objectives (Hoy and Miskel, 2001). For Burušić et al. (2016), the main objective of education is to reduce education inequality and achieve equity in education or whether education should target excellence. Thus, it has been shown that the favorable characteristics of schools contribute better to the improvement of disadvantaged students (Kyriakides, 2004), thereby increasing the academic success of all the students in a school. This leads to excellent results and reduces differences between students, which leads to equity in education (Burušić et al., 2016).

Several approaches make it possible to highlight the links between the socio-educational environment and performance. Baker et al. (2003) sought to theorize the impact of the school environment on children development. Inspired by Bronfenbrenner’s ecological approach to development (1979) and self-determination theory by Deci and Ryan (1985). The authors consider that schools function as psychologically positive environments when they respond appropriately to the developmental needs of students. These beliefs, in turn, affect student engagement and participation in school. Finally, drawing on the theory of self-determination which stipulates that individuals have three basic needs - autonomy, competence and social belonging (Deci & Ryan, 1985), the authors consider that schools offering students the opportunity to meet these needs can be considered as psychologically favorable environments.

With socio-constructivism, many pedagogical approaches were born to encompass several parameters that come into play in the learning process, in particular with the work of (Bandura, 1997) and the multivariate approach (Lubart, 2003) that constitute theories which make it possible to envisage learning in a holistic and interdependent approach, where cognitive aspects meet emotional, physiological, environmental ones.... Motivation does not depend on the subject or the situational alone, but it results from their interactions.

What is the issue of this work?

Faced to the great challenge that is to limit failure or dropout as much as possible and to promote quality school, it seems important to look into this subject.

It is vital to dwell on this problem of school performance because it involves the competitiveness of our education system, a guarantee of harmonious development.

The research question is: does the school environment have an influence on student performance?

Methodology

General objective

The objective of this study is to establish the relationship between the school environment and students' performance.

Specific objectives

To achieve this main objective, several specific objectives need to be stated. These are:

- determining the acceptable conditions that can improve school performance from the point of view of school actors;
- to study the relationship between the atmosphere of security, collective serenity and the teaching-learning process;
- tell the link between the academic satisfaction of the school actors and students' results.

General hypothesis

There is a relationship between the components of the school environment and students' performance.

Specific hypotheses

- The perceived well-being of students promotes their performance.
- Non-violence positively influences the school climate and lead to learners performance.
- Students' satisfaction leads to their motivation, that influences their results.

Operationing.

Independent variables

First independent variable: learning conditions

The variable "learning condition" refers to the learning atmosphere, the comfort within the school and in the classrooms, lighting level, ventilation and the adequacy of the rooms, the number of students ... It also includes educational and supervision practices.

Second independent variable: relationships of the actors

It is a question of detecting the level of exchanges between students and teachers on one hand, between students and supervisors on the other hand and finally among students.

Third independent variable: feeling of security

The “safety of the actors” is based on the protection of properties and people within the school, the protection of the school environment in relationship with demonstrations during course, disruptions and finally to altercations between students, that can lead to communal conflicts.

Intermediate variable: motivation

It is based in our work on the overall satisfaction perceived by the students.

Dependent variable: school performance

The dependent variable is the average at the end of the first term during the school year 2018-2019.

Population

The population concerned by our study is made up of the internal actors in the various public and private grammar schools. For this study, students and supervisors will be our target population and our data has been collected from 227 students and 36 supervisors. Table 2 shows the distribution of the students surveyed according to their school, classroom, age and gender. The population surveyed is made up of 227 supervisors, i.e. 126 girls (55.51%) and 101 boys (44.49%) aged 16.13 on average and 36 educators. These students go to public (184 or 81.06%) and private (43 or 18.94%) schools in the city of Agboville. The supervisors, too, are from the city’s public and private grammar schools. The largest number of students are those of form 4 (104 students, or 45.81%) and those of advanced level (64 students, or 28.19%).

Sampling technique

The technique of random stratified sampling with one element per stratum was used. The stratified random samples constitutes the final sample which will be used for this study. Sampling in the students population gives a number of 50 students and the educators population remained the same (36).

Table 1: Distribution of the students surveyed according to their school type, class, age and gender.

Type d'établissement	1-public	2-privée					
	184	43					
	81,06 %	18,94 %					
classe	1-6e	2-5e	3-4e	4-3e	5-2nde	6-1ère	7-Tle
	17	12	13	104	7	10	64
	7,49 %	5,29 %	5,73 %	45,81 %	3,08 %	4,41 %	28,19 %
âge	-12	12 à 14	14 à 16	16 à 18	18 à 20	20+	
	1	26	72	67	37	24	
	0,44 %	11,45 %	31,72 %	29,52 %	16,30 %	10,57 %	
sexe	1-M	2-F					
	101	126					
	44,49 %	55,51 %					

Data processing techniques and tools

Procedure

For the students, we have chosen to classify them according to their level: from form 1 to Advanced level with a stronger emphasis on the students of form 4 and A level. It will therefore be a case of performing a psychometric analysis of the impact of the school climate on students' performance. The Variables related to the socio-economic status of parents and students residential conditions are not used.

Questionnaire

The tool covers many aspects related to school climate, the problems that may exist and supervision practices. It offers both a detailed analysis and an overall vision of the school.

Data processing

Descriptive analysis

The descriptive analysis is done by flat sorting and makes it possible to count the numbers. For each item, the responses are distributed on a 4-points scale and these different intensities will be considered as clues that will count. It will describe the students' responses and identify the elements of satisfaction and dissatisfaction concerning school life.

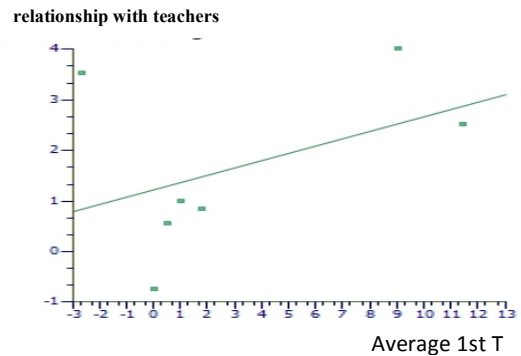
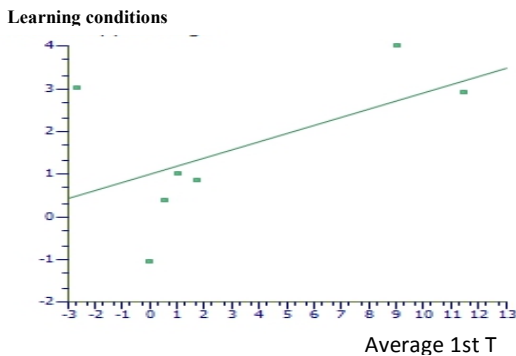
Multilevel analyzes

In the case of a multivariate relationship, multiple regression is used to determine the value of the different coefficients which give the value of each factor on the dependent variable (academic performance). The data processing required the use of two statistical software: XLSTAT 2019 for sampling and descriptive analysis and SPHINX IQ2 for crossovers between the different dimensions of the variables and multiple linear regression.

RESULTS

Hypothesis 1: *Perceived well-being of students promotes student performance*

The explanatory variables used here are the learning conditions, the relationships with teachers, then the educational practices and supervision.



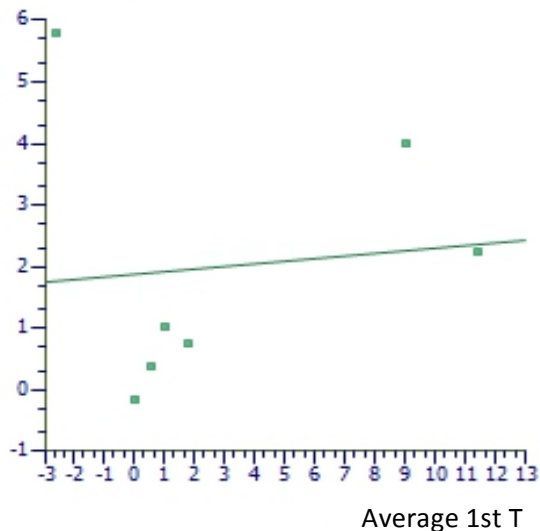
Crossing of "learning conditions" with "Average 1st T"

Crossing of "relationship with teachers" with "Average 1st T"

Correlation = 0,55 (The relationship is not very significant)

Correlation = 0,43 (The relationship is not very significant)

Educational and coaching practices



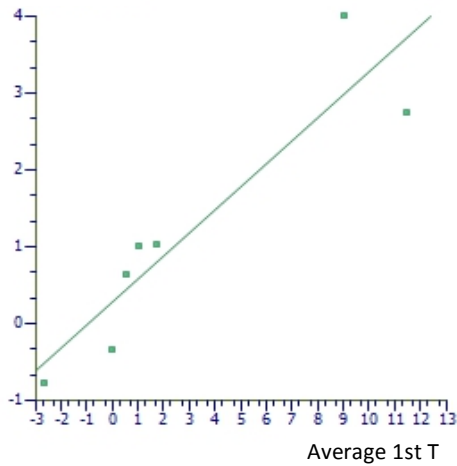
Crossing of "Educational and coaching practices" with "Average 1st T"
Correlation = 0,10 (The relationship is not significant)

- link of the question "Educational practices and supervision" with the average question 1st T "
- Correlation = 0.10 (The relationship is not significant)
- When crossing with the dependent variable:
 - the variable "learning condition" is weakly correlated with this variable ($r = 0.43$). Its action is insignificant;
 - the variable "relationship with teachers" whose correlation coefficient $r = 0.28$ has a relationship that is not significant;
 - for "educational and supervisory practices", the correlation coefficient is equal to 0.10 so the relationship is not significant.

Hypothesis 2: *Non-violence positively influences the school climate and results in learners' performance*

The feeling of security in the school environment is essentially based on the perception of violence by students in their relationship with peers. Other elements that could impact the security climate are also signified by the variable "problem at school".

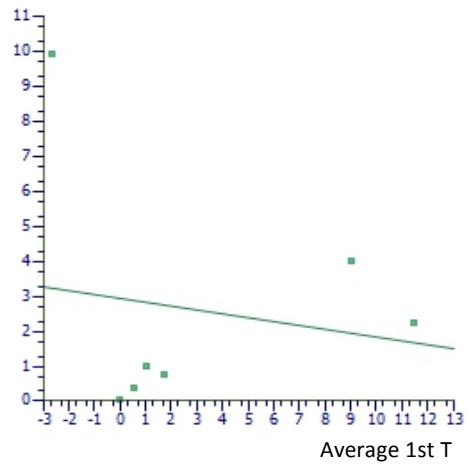
Security feeling



Crossing of "security feeling" with "Average 1st T"

Correlation = 0,92 (The relationship is very significant)

Problem at school



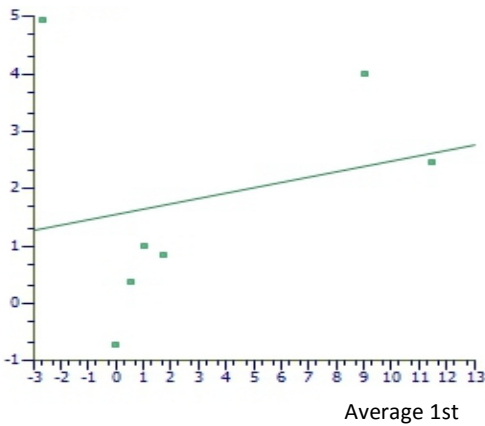
Crossing of "Problem at school" with "Average 1st T"

Correlation = -0,16 (The relationship is not very significant)

The variable “feeling of security” has a very significant correlation with the variable to be explained. The correlation coefficient is equal to 1. As for "problems present at school", there is an insignificant relationship with the dependent variable "mean 1st T", the value of r being -0.45.

Hypothesis 3: Student satisfaction brings about their motivation, which have influences

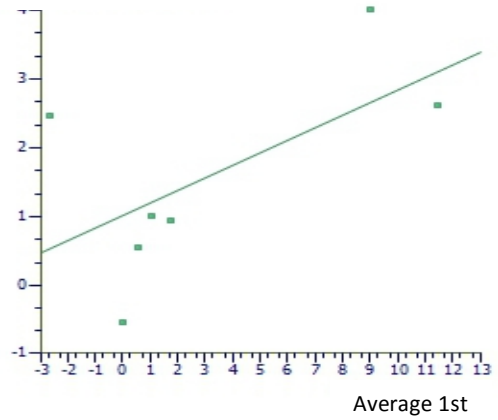
Class satisfaction



Crossing of "Class satisfaction" with "Average 1st T"

Correlation = 0,24 (The relationship is not significant)

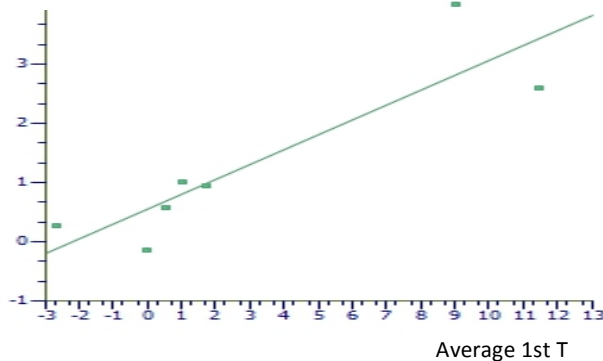
School activity satisfaction



Crossing of "School activity satisfaction" with "Average 1st T"

Correlation = 0,62 (The relationship is significant)

Exam satisfaction



Crossing with "Exam satisfaction" with "Average 1st T"

Corrélation = 0,89 (The relationship is very significant)

Multivariate analysis

Among the eight dimensions of the school environment, inserted in our analysis 7 variables have no influence and do not contribute to the explanation (at 5% threshold). These are educational and supervision practices, satisfaction with school activities, learning conditions, class satisfaction, assessment satisfaction and the problems present at school. On the other hand, only one variable contributes to the explanation (at the 5%

threshold). It's the feeling of security. We note that the school performance: the 1st term average partly depends on the feeling of security. Average 1st T = $-0.36 + 2.83 * \text{feeling of security}$

Discussion

Validation of hypotheses

The first hypothesis reads as follows: the perceived well-being of students promotes their performance. The data from our survey confirms this hypothesis because the characteristic items of the dimensions "learning conditions", "relations with teachers" and "educational and supervision practices" have scores that indicate the inadequacies of the school environment.

The second hypothesis stipulates that the valuation of non-violence positively influences the school climate and impact learners' performance. The "feeling of security" is the variable that has a very significant relationship with school performance. We can attest that this hypothesis is also confirmed. Indeed, violence creates a feeling of unease, annoyance and demotivation because fear has become established in the habits of the weakest students. According to the third hypothesis, student satisfaction leads to their motivation which influences their school results. In other words, students school satisfaction is a major factor in motivating students to seek good results.

Validation of reference theories

This discussion will have all its meaning if we compare our results with those of other researchers and show their conformity with the reference theories used.

Validation of the socio-constructivist theory

According to Galand (2011), the quality of the relationships with the educational team and the perception of the school climate could explain the variations in violence at school. The child or adolescent needs the presence of adults to flourish and develop. "The quality of the relationship that the students felt they have with the teachers influences the number of attacks they are victims of, their perception of the level of violence, their beliefs and attitudes towards the use of violence, their asocial behavior and the development of pro social behavior.

Validation of the self-determination theory

This work has shown, particularly in the context of the self-determination theory (Deci and Ryan, 2002) that the value of establishing in the classroom a climate that supports students' competence and their

autonomy promote adaptive behaviors. A teacher who supports his students autonomy, is flexible, offers choices to students, retains and enriches their ideas, encourages their initiatives, uses language that is truly informative for them.

As Laguardia and Ryan (2000) indicate: “A classroom that encourages the exercise of autonomy, the feeling of competence and interpersonal affiliation is a classroom which engages the students more, promotes their success, and increases their psychological well-being”.

Conclusion

The influence of the classroom, the quality of school life, the students' well-being, the deterioration of school environment, recurring problems in the school environment, the educational and supervision practices impact school results. These have been evaluated through a multivariate analysis based on multiple linear regression and cross-comparison with different variables. It has been established that school performance is mainly influenced by secure school environment with a significant effect on the relationship between actors and learners' overall satisfaction. The results obtained at the end of this research show that there can be no quality academic performance if ideal conditions for learning, well-being and overall student satisfaction are not gathered.

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