

Determinants of school failure among fifth-grade students in the precarious neighborhoods of the city of Bouaké

ASSUE Yao Jean-Aimé¹ and *GUEI Faustin²

¹Doctor of Geography, Alassane Ouattara University

²Doctoral student in Geography, University Alassane Ouattara

Email: assuyao@yahoo.fr¹

*Corresponding Author Email: faustin.guei@yahoo.fr²



*Corresponding Author

GUEI Faustin

²Doctoral student in Geography,
University Alassane Ouattara

*Corresponding Author Email:
faustin.guei@yahoo.fr²

Abstract

In the city of Bouaké precisely in the state of Ivory Coast, many students from precarious neighborhoods are plagued by academic failure. The observation through the precarious neighborhoods investigated is that the socioeconomic and socio-demographic situation of the students and their parents are difficult. The purpose of this study is to establish the link that these precarious conditions could have with poor academic performance. It will therefore be a question of analyzing the determinants of academic failure of CM2 (middle course primary school in Ivory Coast) students from precarious neighborhoods in the city of Bouaké. The study was based on documentary research and a field survey. The results indicate that students from these neighborhoods face many difficulties such as the size of siblings which is around 8 to 12 and 80.83% of households have an average monthly income of between 15,000 CFA francs and 60,000 francs CFA. In addition, there is the problem of the imbalance of the school map in the city of Bouaké with the corollary of an average of 1.87 km travelled by students to reach a school. The correlations established between the socio-professional situation of parents and the school results of the pupils were sometimes found to be strongly correlated, as with parents in civil service, and sometimes to be weak, like parents with a low level of education. The poor academic performance of CM2 students from precarious neighborhoods in Bouaké is above all the consequence of the appalling living conditions in this environment.

Keywords: determinants; school failure; CM2 Students; precarious neighbourhood; Bouaké.

Introduction

Access for all to a basic education and completion of primary education by the world's children is one of the most important goals of the Millennium Development Goals and the World Fit for Children plan of action (MDG, 2006, P.7).

Education then becomes an essential condition for the fight against poverty, the empowerment of women, and the protection of children from hazardous work (MDG, 2006, P.10). Thus, the Ivorian authorities have understood the

need since independence, making schooling for children an obligation. It therefore devotes (43.5%) of its budget to the training of children (Revue nouvelle école N°16, MENET-FP, 2018, P.25). The State's efforts were crowned by a growth in the schooling rate of over (50%) at the end of the 1990s and over (60%) in 2019 (Revue nouvelle école N°17, MENET-FP, 2019, P.49). However, socio-spatial disparities persist in terms of children's schooling. There are two distinct and opposing areas. In some region, the school enrolment rates are over (60%), while other areas such as

illegal slum areas register less (Diahou, 2000, P.17). These neighborhoods have emerged as a result of the acceleration of the urbanization process, which is a consequence of the significant demographic growth experienced by African countries. This poorly controlled urbanization is characterized by the proliferation of precarious neighborhoods in which the vulnerability of families does not make it easy for many children to attend school.

Bouaké, like Ivorian cities, is home to many precarious neighborhoods. These housing areas, which are neither controlled nor covered by the local urban plan, are home to populations with difficult access to drinking water, electricity, health and socio-educational infrastructures. With this in mind, the aim of this study was to analyze the determinants

of school failure among fifth-grade students in the precarious neighborhoods of the city of Bouaké. The framework of the study will take into account the socio-demographic profile of students from disadvantaged neighborhoods, the reasons for their academic failure and the links that may exist between academic failure and these factors.

Methodology

The study area is the city of Bouaké, capital of the Gbêké region (Figure 1). It lies between longitudes 7°38' and 7°48' West and latitudes 4°80' and 5°60' North.

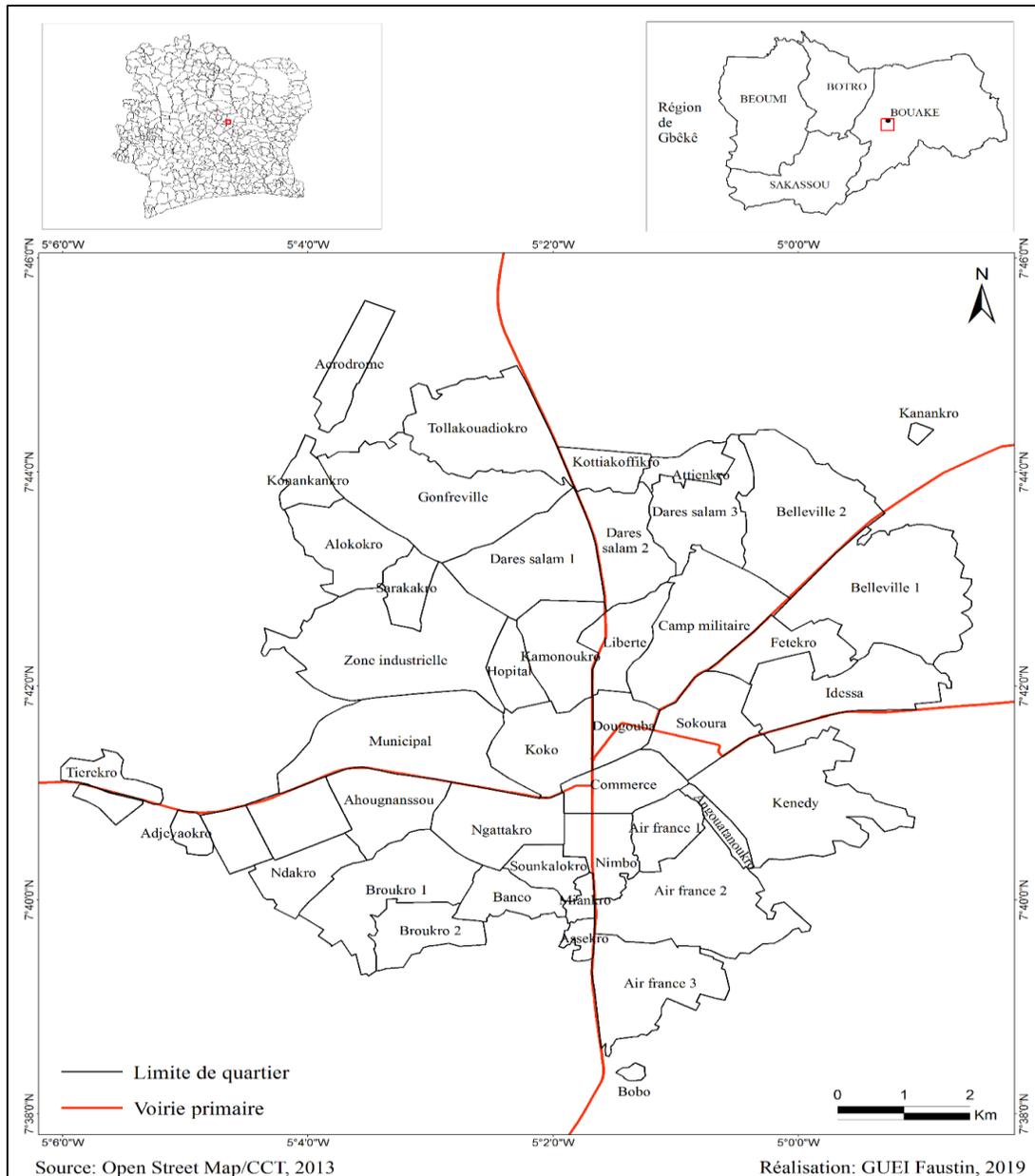


Figure 1: Location of the city of Bouaké

This study is essentially based on documentary research and a field survey. The literature search gathered information from documents related to the topic. As for the

field studies, they took place in public elementary school and in precarious neighborhoods of the city of Bouaké using a questionnaire. Since it was impossible to survey the entire

population of the 145 neighborhoods of the city of Bouaké, the choice of a sample was a requirement. To do this, two sampling techniques were highlighted. The first technique is the empirical method of reasoned choice which was applied to the spatial framework for the choice of districts because of their large numbers and urban characteristics. The second method.

The sampling method used is the two-stage elementary random draw survey for determining the sample size and selecting the households to be surveyed. After this approach, the survey was conducted in five (05) neighborhoods: Sossonoubougou, Banco, Djambourou, Adjéyaokro and Gbintou. The choice of these neighborhoods was made objectively, taking into account their specific spatial, social and demographic characteristics, the level of equipment and basic services. Our study based on two methods: quantitative and qualitative. In the qualitative investigative approach, the researcher starts from a concrete situation comprising a particular interesting phenomenon and aims to understand the phenomenon and not to demonstrate, prove or control anything. He wants to give meaning to the phenomenon through or beyond the observation, description, interpretation and appreciation of the environment and the phenomenon as they present themselves. The intention (goal, objective) of the research is to recognize, name, discover and describe the variables and relationships discovered, and thereby to understand a complex and poorly understood human or social reality. As for the quantitative method, he will favor surveys and experiments, and will attempt to test hypotheses or statements with a view to generalizing from the particular. The quantitative research will typically concentrate in measuring or counting and involves collection and analyzing numerical data and applying statistical tests. Both quantitative and qualitative research will observe phenomena, transform the observations into concepts which manifestations will be treated as variables.

A combination of both quantitative and qualitative methods was used to determine the number of students to be surveyed. The collection of quantitative data was based on a representative sampling data sheet of households in poor neighborhoods with students in CM2. These are candidates who have spent more than one year in school starting in the period 2017 to 2019. The qualitative data were constituted from an interview sheet with the administrative staff of DRENT-FP, the Town Hall and the CIE / SODECI. The sample size (n) was obtained using the approximation proposed by H. Gumachan et al. 2000, p. 346; K. Konan, 2012, p. 83.

$$n = \frac{Z^2(PQ)N}{(e^2(N-1) + Z^2(PQ))}$$

n = Sample size;

N= Parent sample size;

Z= Margin coefficient determined from the confidence level;

e= Margin of error;

P= Proportion of households assumed to have the desired characteristics. In the case where no value of this proportion is available, it will be set at 50%, i.e. 0.5; Q= 1-P

The methods used made it possible to survey 270 students in precarious neighbourhoods. Thus, in order to have a perception of the results of the students from the serviced neighborhoods, it was decided to interview 135 of the CM2 class students using the random method. The distribution of this complementary sample was determined using the rule of three according to the total number of students in each neighborhood. Thus, 405 students were interviewed from 12 selected schools.

According to the geographical location of the precarious and serviced districts. In addition, due to the lack of data on deprived neighbourhoods at the level of the 2014 RGPH, a sample of 240 households has been selected from all the deprived neighbourhoods of Bouaké.

The results of the calculations are recorded in (table 1).

Table 1: Number of pupils and households in the survey from 2017 to 2019

Type of neighborhood	neighborhoods	Host School	Number of students from precarious neighborhoods	Number of students surveyed	Number of households surveyed
precarious neighborhoods	Sossonoubougou	Hôpital	192	57	79
		Aboliba	145	43	
	Banco 1	N'gattakro 2A	100	30	84
		Banco 1	167	50	
	Djambourou	Liberté 1	185	55	77
Liberté 2		121	36		
Set of precarious neighborhoods	3	6	910	270	240
Serviced neighborhoods	Air-France3	TSF Sud 1	316	23	-
		TSF Sud 2	318	23	
	Kennedy	Annexe 3	339	24	-
		Annexe 4	410	29	
	Commerce	Ville Nord A	335	24	-
		Ville Nord B	163	12	
Set of Serviced neighborhoods	3	6	1881	135	-
Total	6	12	-	405	-

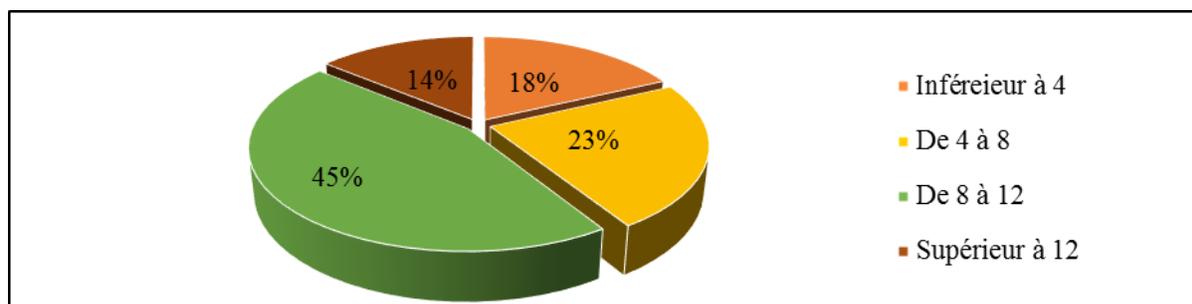
Source: Field surveys, 2019

Results

Socio-demographic profile of CM2 pupils and parents of pupils in the precarious neighbourhoods of the city of Bouaké

Demographic characteristics of pupils and parents of pupils (age, level of education, marital status, socio-professional situation, etc.)

In Bouaké, according to the surveys conducted, (50 percent) of primary school pupils come from precarious neighbourhoods and their ages vary between 6 and 14. Households in precarious neighbourhoods in Bouaké generally include many children, as shown in Figure 2. The preponderance is found among heads of household with children between eight (8) and twelve (12) children with a proportion of (45 percent %). It emerges that households in precarious neighbourhoods have a large number of children. The large number of children in households in these neighbourhoods is the corollary of polygamy.



Source: Our surveys, 2019

Figure 2: General distribution of heads of household by number of children

Sibling size is often associated with overcrowding. This overcrowding makes it less easy to escape family demands and to preserve time for school concentration. For example, overcrowding is associated with cohabitation constrained by 'noise' and the difficulty of finding time and space for school

concentration. However, overcrowding is not systematically experienced as a barrier to school work. Working class families in which parents work in low-paying professions such as blue-collar or white-collar jobs more often face a

deterioration in their living conditions. This is prevalent in the precarious neighbourhoods of the city of Bouaké.

Standard of living and living conditions of parents and parents of pupils

In Bouaké, the majority of heads of households (54.17%) reside in precarious neighbourhoods. They are mostly actors in the informal sector and self-employed (Figure 3).

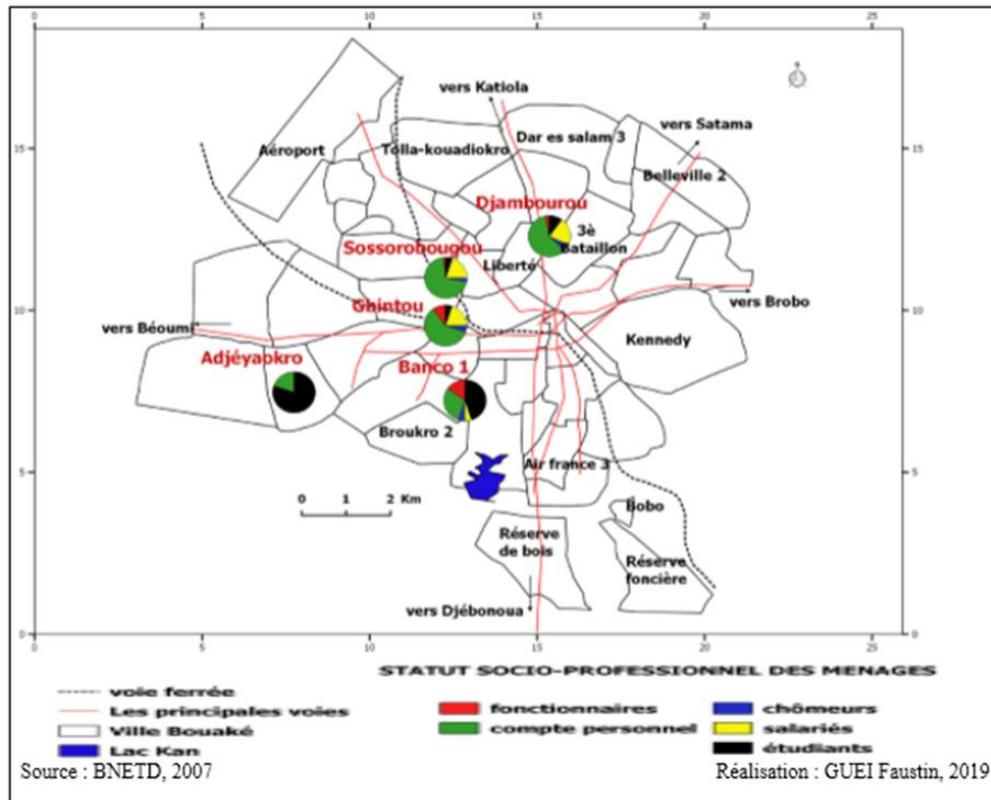


Figure 3: Distribution of heads of households by socio-professional status

This figure shows that self-employed actors in the informal sector account for (60%), they dominate in all the precarious neighbourhoods of the city. Students with (22.5%) come in second position. They are mostly in Adjeyaokro and Banco, neighbourhoods close to the University. The employees, who are mostly workers (13.33%), are found more in Sossoroubougou, Gbintou and Djambourou around the industrial zone. The unemployed (2.5%) and civil servants (1.67%) are less numerous. The more numerous civil servants in Gbintou and Banco1 argue the proximity to the place of service and the crucial lack of flats which the city of Bouaké has been facing since 2012, marking the return of the administration and services after the military-political crisis of 2002.

In addition, more than (80.83%) of the households surveyed have an average monthly income of between 15,000 and 60,000 CFA francs. It results from this observation that more than 4/5 of the households surveyed have a monthly salary below the SMIG (Guaranteed Interprofessional Minimum Wage). The salaried workers, who represent (13.33%) of the population surveyed, have no qualified vocational training, they work as security guards or as industrial workers.

The income of the heads of households, depending on the type of activities carried out, is insignificant and is generally below 100,000 CFA francs/month. The weakness

and instability of the financial resources increased by the expansion of siblings also makes certain necessary or profitable expenses impossible from an educational point of view. In this atmosphere, the lack of means, the main reason prevailing in these neighbourhoods, can be a powerful determinant in the poor school results of the children living there. Motivations, determinants and causes of the school failure of pupils in the precarious neighbourhoods of the city of Bouaké.

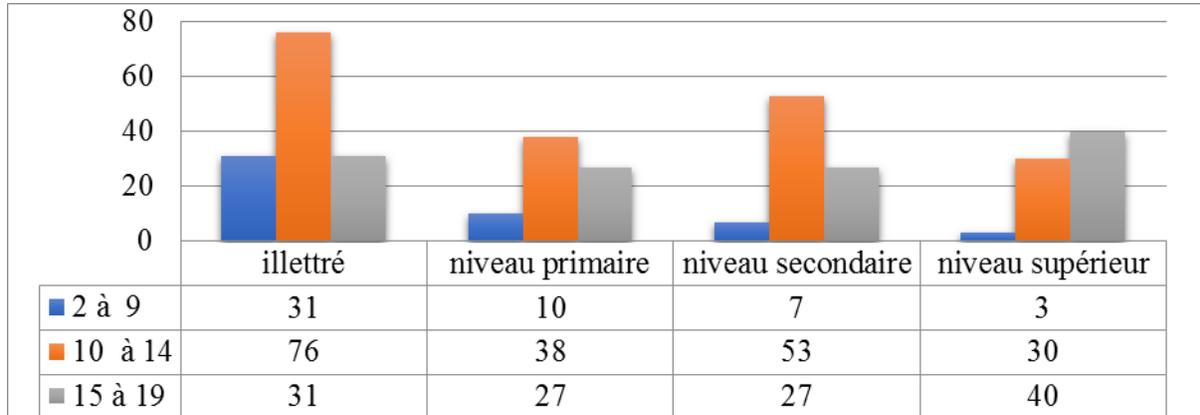
The impact of the level of education of parents of pupils from precarious neighbourhoods on their children's performance

Investigations carried out in the precarious neighbourhoods of the city of Bouaké reveal a high proportion of illiterate people (51%). These are followed respectively by heads of households with primary (23.33%), higher (20.84%) and secondary (5.83%) education.

The distribution of respondents according to the educational level of their parents and their average reveals that the pupils surveyed who have an average of more than ten (10) are from literate families. Similarly, (60.78%) of those with an average of less than ten (10) are from illiterate families (Figure 4). This implies that pupils have a high chance of succeeding if their parents have a school education. Because of their status, the latter have a better

understanding of the merits of education, so they do not skimp on the means for looking after their children. However, there are some excellent pupils from illiterate or deprived families. From interviews with some parents, it appears that some pupils are naturally predisposed to study and for

others it is a personal desire. But the proportion of the latter remains very low. Poor monitoring and supervision of pupils by parents are at the root of the high failure rates at the level of entry to the sixth form and the CEPE.



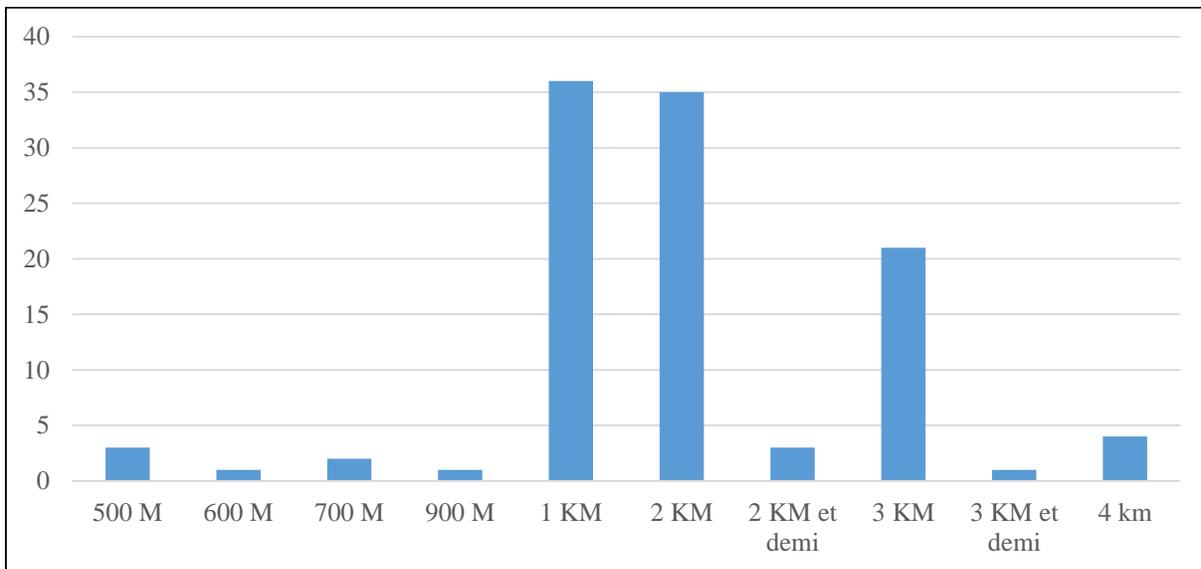
Source: Field survey, 2019

Figure 4: Distribution of respondents according to their averages (/20) and the parents' level of education

Problem of the geographical accessibility of the establishments attended

The difficulties of physical access of pupils to public primary schools are due to the lack of infrastructure in poor neighbourhoods. Indeed, this inadequacy results from the

attractiveness and uncontrolled urbanisation of the city, which has as a corollary the uncontrolled creation of new neighbourhoods without public socio-educational facilities. The consequence of this lack of infrastructure is the lengthening of the home-school distances of pupils from precarious neighbourhoods. (Figure 5).



Source: Personal Survey, 2019

Figure 5: Distance travelled by CM2 pupils from precarious neighbourhoods

An analysis of the figure above shows that the distance between home and school travelled by pupils in the precarious neighbourhoods of Bouaké is on average 1.87 km. There is a high concentration of schools in the central districts of the city. This unequal distribution leads to problems of displacement, especially as the city of Bouaké is now experiencing the phenomenon of urban sprawl.

In order to do this, all students who live on the outskirts of the city have to travel long distances to access the training. Thus, for pupils coming from the precarious neighbourhoods of Bouaké, (20%) to (35%) travel more than 2 km to reach their various schools. The concentration of school services in the city centre corroborates this fact (Figure 6), since the

majority of the precarious neighbourhoods are located on the outskirts of the city of Bouaké

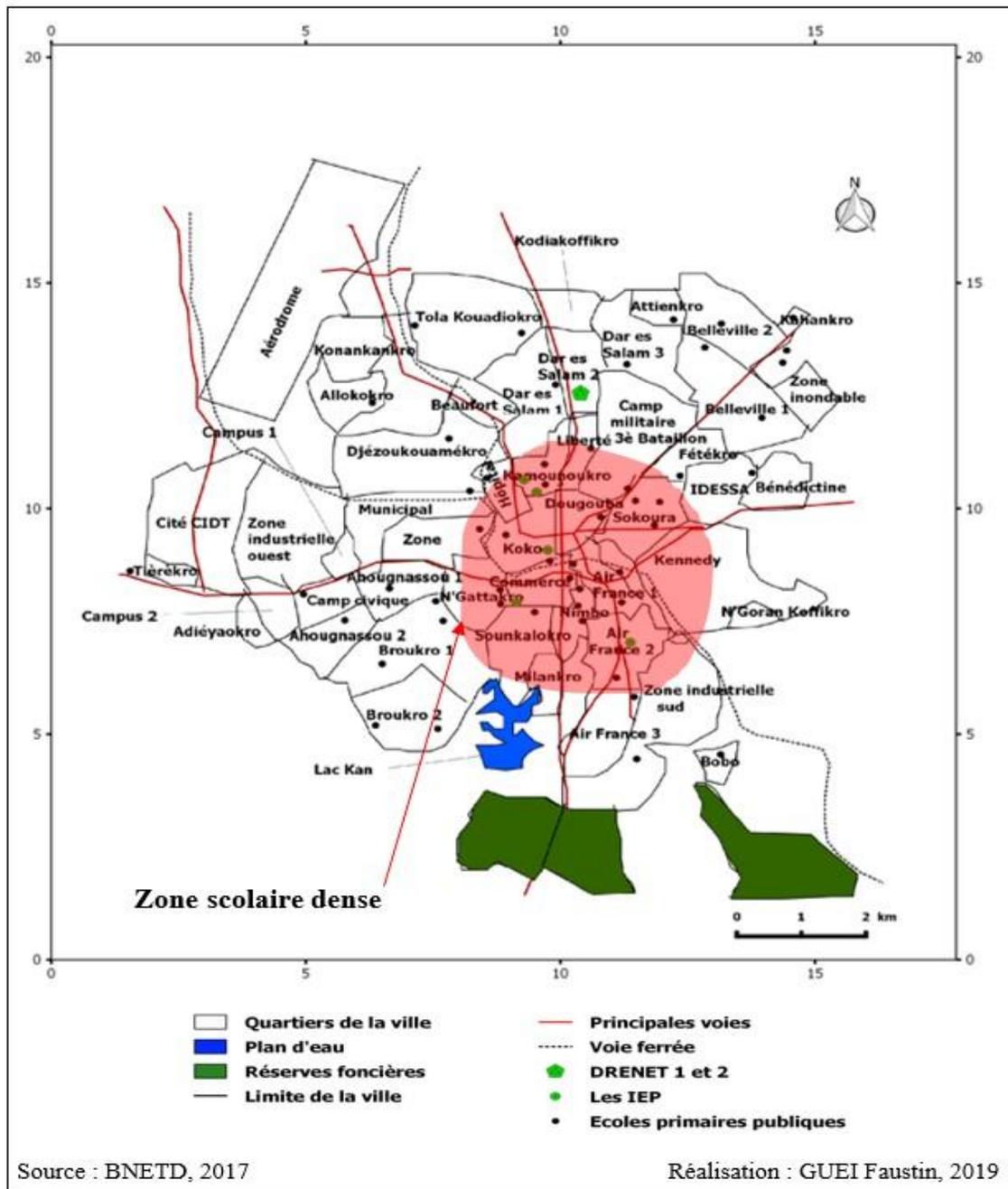


Figure 6: Distribution of public primary schools in the city of Bouaké

Repeated strikes

Despite the refocusing measures initiated by the public authorities to calm the social climate, the Ivorian school environment is tinged with repeated strikes. Demand and protest movements originate either from teachers or learners. The unpredictable consequences are accompanied by the cessation of teaching. In the town of Bouaké, as is the case in Côte d'Ivoire's school districts,

strikes are legion and this does not allow children from disadvantaged neighbourhoods to benefit from learning, unlike other children in well-developed neighbourhoods who have tutors during strike periods.

In addition, other determinants such as Sunday learning difficulties are also at the root of the school failures of pupils from deprived areas. In fact, as an extension of the learning conveyed by teachers in schools, pupils from disadvantaged neighbourhoods are subject to a deepening of skills in their

respective homes. However, certain Sunday conditions hamper their ability to maintain the skills they have acquired. The lack of teaching materials, lack of time for household chores, domestic nuisances, the problem of water and the problem of electricity due to the drop in voltage caused by outdated connections.

Correlation between student performance and the activity and educational level of parents of students

Correlation between student performance and parent activity

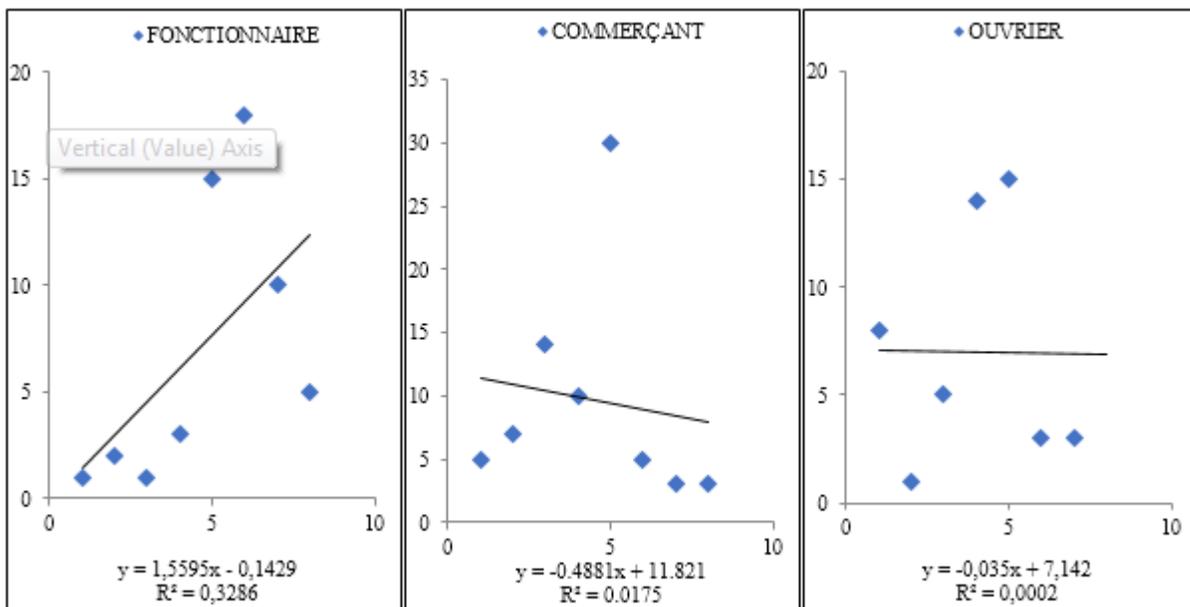
In order to understand the level of success of CM2 pupils from the precarious neighbourhoods of Bouaké, it is important to assess the correlation between their results and parental activity. Three activities are highlighted: civil servants, shopkeepers and workers.

The coefficient of determination highlighted at the level of the profile of civil servant parents (Figure 7) shows a linear

correlation between the school results of the pupils and the parents' civil servant profession. This linear regression equation ($y = 1.5595x - 0.1429$), indicates that the average increases with the civil servant profession of the parents. The coefficient of determination ($r^2 = 0.3286$) shows that at

At the level of the parents' civil servant profession, (32.86%) of success depends on this activity. The fact that a pupil has a civil servant parent somewhere determines the conclusive path to good school performance.

However, according to the linear regression line equations ($Y = -0.4881x + 11.821$ and $Y = -0.0357x + 7.1429$), students' academic performance changes negatively with the parents' trade and labour activities. The coefficients of determination show that only (1.7%) and (0.02%) of the cases of success depend respectively on the parents exercising these types of activities. The coefficients of determination show that only few cases in terms of school results depend on these types of activities.



Source: Field surveys, 2019

Figure 7: Correlation of students' educational outcomes and parents' occupations

In some cases, parental activity can influence students' academic performance. What emerges from this analysis is that good school performance is determined by a stable and lucrative occupation of the parents. This is the case for students whose parents are civil servants, this class of pupils tends to be those who perform well in school. As for pupils with working class parents, they are in a class that tends towards poor academic performance. However, previous analyses have shown that it is this class of pupils that is more likely to be found in precarious neighbourhoods. Indeed, the dominant class of activity in these neighbourhoods is the working class. Based on this comparison, we can affirm that pupils from the precarious neighbourhoods are more exposed to poor school performance, with a failure rate of around (87%) according to our surveys. However, the occupation factor of the

parents does not necessarily determine the poor school performance of pupils from disadvantaged neighbourhoods, so other factors such as the educational level of the parents need to be studied.

Correlation between pupil performance and parental educational attainment

The negative sign of the steering coefficient in the right-hand equation $Y = -0.0238x + 5.1071$ shows that the educational achievement of students is negatively related to the low educational level of their parent. This equation of the linear regression line indicates that the average decreases with the low educational level of the pupils' parents (Figure 8). The coefficient of determination ($r^2 = 0.0002$) shows the existence of a weak binding intensity correlation. This

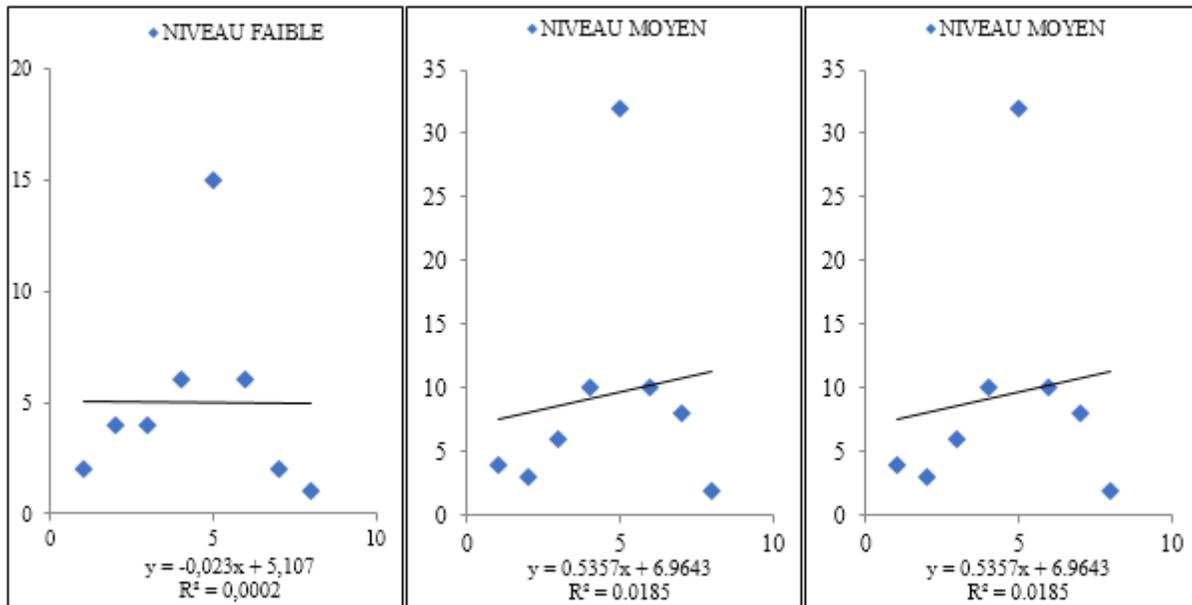
means that low student averages are not necessarily related to the low educational level of their parents.

The coefficient of determination ($r^2 = 0.0185$) of the average educational level of the parents of pupils shows a linear correlation between the average educational level of the parents and the educational achievement of the pupils. This coefficient indicates that the parents' average level of education is not necessarily a determining factor for better student performance. Only (1.8%) of school results depend on this level of education of the parents. However, the positive sign of the guiding coefficient (+0.53) of the right-hand equation $Y = 0.5357x + 6.9643$, shows that the academic performance of students is positively related to

the average level of education of their parents. Therefore, it is possible that school performance may increase with the average educational level of the parents.

Looking at the equation of the linear regression line $Y = 2.5833x + 0.5$ and the positive steering coefficient (+2.58), it appears that not only does the average increase with the higher educational level of the parents, but also that it is positively related to the parents' higher educational level.

The parents' good level of education. The coefficient of determination of 0.226 shows that good parental educational attainment is a key determinant and can stimulate better student performance.



Source: Field surveys, 2019

Figure 8: Correlation between students' academic performance and parents' educational attainment

The correlations implemented between the academic results of pupils in CM2 classes and the level of parental education reveal that a good level of parental education can be an asset for good results. Parental education can also influence students' academic performance. De facto, student performance could be negatively influenced by low parental education. However, this is not always verified as the existence of a correlation between the two variables would be of relatively low binding strength. As the socio-economic environment is not always the cause of the school failure of pupils from the precarious neighbourhoods of the city of Bouaké, other parameters will be interesting to take into account, such as repeated strikes in the school environment, cases of massification etc.

Discussion

This study on the determinants of school failure among CM2 pupils in the precarious neighbourhoods of the city of Bouaké shows that the correlation between pupils' academic results and the level of education and profession of the parents of pupils is palpable in some cases. Students'

academic results are better when parents have a good level of education or a fairly modest occupation.

However, households in poor neighbourhoods are governed by heads of households who mostly have a low level of education and low income due to low-profit employment. This reflects an environment that is not conducive to the academic and social development of the pupil. It also affects the performance of students from this background.

These results are similar to those of other studies. Indeed, (Yapi Diahou, 2003, P.17), who studied the same schooling conditions in two precarious neighbourhoods in Abidjan, shows that children with low school performance are mostly from households with low financial income. In the same vein, (Kouamé 2010, P.149) considers that people in precarious neighbourhoods lead a difficult life. They live in total destitution and disconcertingly precarious conditions, without the usual amenities: sanitation networks, running water, electricity, local facilities, etc. (Kouamé 2010, P.149). These precarious living conditions have an impact on the school results of pupils, which explains the poor school performance of children from precarious neighbourhoods. Nguénan Siméon (2007 P. 186), in his study on the school

dropout rate of children from the precarious neighbourhood of New-Bell (Douala/Cameroon), contributes to saying that the school dropout rate of children from the New-Bell neighbourhood can be explained by the learner's social environment. He adds that there is a certain "determinism" to school dropout in the precarious New-Bell neighbourhood.

The multidimensional concept of poverty may in part be one of the causes of school failure in Côte d'Ivoire, especially in precarious neighbourhoods. Authors such as (Dussart et al., 2000 P.862) have shown that poverty and school success are linked. Specifically, the particularities of certain precarious neighbourhoods condition the educational performance of pupils from this environment. Moreover, other authors attribute the failure of pupils in general and the failure of those from precarious neighbourhoods in particular to other parameters besides the socio-economic environment. (Blat Gimeno J., 1984, P. 129) show that certain elements such as the lack of school infrastructure and the corollary of the distance between home and school, early marriage, the language of instruction, and the size of siblings are unfavourable to the child's success at school. Likewise, in the debates surrounding the

When defining the school map, the question of sectorisation is the one that attracts the most attention. In fact, the sectorisation of schools is a favourable tool for combating long distances between home and school. This tool would therefore be conducive to better school results. However, recent analyses tend to show that the administrative management of the school map can have contradictory effects when taken in a contradictory context. School maps often do not respect a homogenous distribution, thus marginalising certain pupils. This poor distribution is most often at the root of school failure (Lafarge T., 2011, P.29).

Conclusion

The determinants of the school failure of CM2 pupils from the precarious neighbourhoods of the city of Bouaké highlight several parameters. The living conditions of the parents' homes and the geographical location of the schools attended are all factors that influence the school situation of CM2 learners. However, the education system in Bouaké is plagued by many difficulties, but the most important remains the impact of the military-political crisis that lasted from 2002 to 2011. In doing so, other problems such as weak school infrastructure undermine primary school in Bouaké. Apart from these difficulties, the city of Bouaké has an important network of primary school facilities, but these are poorly distributed, leaving the precarious neighbourhoods on the margins. Finding solutions to remedy this situation would be essential in order to increase the success rate of the CEPE exam in public primary schools in the city of Bouaké.

References

BLARY R. et al. (1999). *Urbanité et quartiers précaires*, Bibliothèque nationale de Québec, pp 28-29

- BLAT Gimeno J., (1984). *L'échec scolaire dans l'enseignement primaire : moyen de combattre*, 1984, 129p.
- DUSSART et al. (2000). *Revue de droit public et de la science politique en France et à l'étranger*, RDP, N° 4, 839-862 p.
- ENV, (2015). « Enquête sur le Niveau de Vie des ménages en Côte d'Ivoire, profil de pauvreté », Abidjan, version 8.
- KOUAME. K. S, (2010). *Regard retro-prospectif sur les crises ivoiriennes de 1993 à 2011*, in « Cinq continents, revue roumaine de géographie », volume 3/numéro 8 Hiver 2013, Bucarest, pp 127-149.
- LAFORGUE T., (2011). *de la réussite scolaire au Québec: une analyse historico-culturelle*, Université Laval, Québec, Canada, CRIRES, volume XXXIX:1, printemps, 29 p.
- MINISTÈRE DE L'EDUCATION NATIONALE, (2009). *L'état de l'école en Côte d'Ivoire*, Rapport d'analyse 2008-2009, pp25-49
- NGUENAN Siméon (2007). *étude sur le décrochage scolaire des enfants du quartier précaire de New-Bell (Douala/Cameroun)*, p. 177-186.
- OMD: *Développement et du plan d'action un Monde Digne des enfants*, 2006, P.7. 10
- YAPI D. A., (2003). *la recherche urbaine à l'épreuve des milieux marginalisés dans la ville d'Abidjan*, EDUCI, 123p.
- YAPI. A., (2000). *Territoires et profils de la précarité urbaine à Abidjan*, Paris, Conférence Hexa polis: six mégapoles face au défi des nouvelles inégalités, 17 p.
- BLARY R. et al. (1999). *Urbanity and precarious neighborhoods*, National Library of Quebec, pp 28-29
- BLAT Gimeno J., (1984). *School failure in primary education: a way to fight*, 1984, 129p.
- DUSSART et al. (2000). *Journal of public law and political science in France and abroad*, RDP, N° 4, 839-862 p.
- ENV, (2015). "Survey on household living standards in Côte d'Ivoire, poverty profile", Abidjan, version 8.
- KOUAME. K. S, (2010). *a retro-prospective look at the Ivorian crises from 1993 to 2011*, in "Cinq continents, revue roumaine de géographie", volume 3 / number 8 Winter 2013, Bucharest, pp 127-149.
- LAFORGUE T., (2011). *Of academic success in Quebec: a historical-cultural analysis*, Laval University, Quebec, Canada, CRIRES, volume XXXIX: 1, spring, 29 p.
- MINISTRY OF NATIONAL EDUCATION, (2009). *The state of the school in Ivory Coast*, Analysis report 2008-2009, pp25-49
- NGUENAN Siméon (2007). *Study on the early school leaving of children in the precarious district of New-Bell (Douala / Cameroon)*, p. 177-186.
- MDG: *Development and a World Fit for Children Action Plan*, 2006, P.7. ten
- YAPI D. A., (2003). *Urban research to the test of marginalized environments in the city of Abidjan*, EDUCI, 123p.
- YAPI. A., (2000). *Territories and profiles of urban precariousness in Abidjan*, Paris, Hexa polis conference: six mega-cities facing the challenge of new inequalities, 17 p.