

Effect of School Massification on the Professional Commitment of Teachers in Togo

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Abstract

Using data collected from a representative sample of public primary schools in Togo, this article analyzes the phenomenon of school massification and in particular its effect on teachers' commitment. A questionnaire was administered to a sample of 129 teachers followed up with 65 interviews. Quantitative and qualitative analyzes were conducted, on the one hand, to test the validity and reliability of the measuring instrument used and, on the other hand, to test the hypotheses of this research. Regression in academic performance analyzes reveal a negative and strong relationship between the plethora of pupils in a class and teacher professional commitment. The results obtained therefore indicate more specifically negative influence of mass schooling on the professional commitment of primary school teachers.

Keywords: School Massification, Professional Commitment, Primary School, Teacher.

Introduction

The recurring theme of recent educational debates in public and political circles is the importance of education, in this case, Education For All (EPT, 2014; Incheon, 2015). It is in this perspective that most of the underdeveloped countries, particularly African states, have made pre-school and primary education free, allowing all children of school age to attend school. The objective of this reform was to achieve a truly democratic school offering equal opportunities to all citizens in order to make them more efficient, more productive; a school adapted to the realities of their country (Assima-Kpatcha, 2007).

Following this reform, the classes experienced a demographic jump with an average of 53 pupils per teacher in primary schools whereas, in the past, the average of this number was only 40 pupils (Mukankuzi, 2006; UNESCO, 2000). Thus, the classrooms planned to initially accommodate a population of thirty pupils, twenty years ago, today accommodate two, or even three times more (Bayoulou, 2009; Paré-Kaboré & Gambre-Idany, 2014). This flow of pupils in the classrooms is followed by several consequences including the massing of schools which will lead to the inadequacy of the infrastructures, driving the experience of stakeholders in a critical situation. This policy of education for all would counteract the crucial value of providing access to a quality-education for all pupils and for teachers who are very

involved or committed to their work (Economist Intelligence Unit, 2012; Pianta, Hamre & Allen, 2012).

In Togo, a large number of pupils have entered primary school since 2008 with the exemption from tuition fees, thus leading to mass schooling. The Municipality of Kozah 1 (in Kara Region) is not immune to this phenomenon as shown in the table below:

Table 1:

Class Sizes In Public Primary Schools In The Municipality Of Kozah 1

Schools	Classes					
	CP1	CP2	CE1	CE2	CM1	CM2
EPP Tchalloudè	83	98	62	80	60	61
EPP Anagram	69	56	58	56	47	50
EPP Tomdè	64	58	55	70	55	47
EPP Tchintchinda	65	41	43	52	51	52
EPP Kara Centrale	64	56	54	53	65	58
EPP Dongoyo	65	58	78	59	43	42

Source: DRE-Kara, 2018 (The Regional Direction for Education in Kara)

It appears from the data in this table that in all the public primary schools of this commune, the class sizes are plethoric. The teacher-pupil ratio, which should be 25/30 pupils per teacher according to UNESCO and 40 pupils/teacher recommended by the 1975 reform often exceeds 50 pupils / teacher in almost all classes. However, these overwhelming numbers are not adapted to the infrastructures and supervisory staff (MEPS, 2019). They constitute a major setback, a handicap for teachers who, with difficulty, manage to ensure effective supervision of pupils (Costa, 2014; Guillemette, 2006).

Avanzini (1967); Din (1999); Sid (1995); Fijalkow and Nault (2002); Darwish (2016) have effectively shown, in their respective studies, that class size is one of the factors influencing the quality of education. Schooling numbers at the same time and in the same setting does not favor a climate of interaction so desired between teacher and pupil. Marie-Claude Grandguillo (1993) talks about the difficulties of teaching in overcrowded classes in view of the tendency to find oneself confronted with as many particular situations as the pupils (the linguistic, social, religious and cultural references with which one must deal, and which create as much distance between them, and above all, between them and the world of school knowledge). School massification or large scale schooling is becoming a hindrance to the education system and, in turn, has repercussions on the commitment of teachers to exercise their profession.

Commitment, conceived as a form of submission and obedience to a self-given mission, should be accomplished without reserve. In this sense, it is not only for the teacher to remain in the teaching profession, but also to practice in a "professional" manner or with "skill"; which implies, among other things, being genuinely committed to the development of one's professional skills (Nias, 1981; Woods, 1981; Day, 1999; Craft, 2000; Moon 2000). Commitment to work therefore refers to the degree of attention to and absorption in professional activities (Shuck, Ghosh, Zigarmi & Nimon, 2013). For Christian, Garza and Slaughter (2011), commitment to work is a concept of motivation which refers to the voluntary allocation of personal resources directed towards a particular task. Two fundamental conceptual dimensions underlie commitment to work, namely energy and involvement (Bakker, Albrecht & Leiter, 2011), with three often poised areas of commitment:

physical, emotional and cognitive (Saks, 2006). In the school environment, the commitment of teachers can be observed on four dimensions (Klassen, Perry & Frenzel, 2013) which encompass the three areas proposed by Saks and Gruman (2011). Social commitment is the energy devoted to building relationships, on the one hand, with pupils (Social Commitment to Pupil) and, on the other hand, with teachers (Social Commitment between Colleague). Then, there is the emotional commitment and finally the cognitive commitment which respectively allude to the temperament of the teacher vis-à-vis his pupils and the mental processes that the teacher develops to pass or impart knowledge to the pupils.

Commitment is considered relatively stable (Macey & Schneider, 2008). However, it fluctuates over time and from person to person (Bakker & Bal, 2010). A study by Sonnentag (2003) confirms the existence of the fluctuation of commitment to work. This fluctuation can be explained by different factors or determinants. The level of commitment depends on certain factors or changes from the employee's environment, in our case study the teacher's environment. There is a significant relationship between the work environment and commitment to work (Anitha, 2014). Various aspects of the environment result from the level of commitment to work. Teachers' commitment is influenced by what is experienced daily in the classroom with pupils (Rosenholtz, 1991). Thus, one might wonder if the plethoric classrooms or the massification would affect the dedication or the commitment of the teacher in terms of transmission of knowledge to pupils. It is in this context that this study is carried out and it aims at analyzing the influence of school massification on professional commitment among teachers of public primary schools in the Municipality of Kozah 1 in Togo.

To achieve this objective, we start from the working hypothesis according to which school massification negatively affects the professional commitment of teachers in public primary schools in the Municipality of Kozah 1. Indeed, the teacher, in his function if not in his role of conveyer of knowledge, must ensure that the beneficiaries have benefited from it, since he is at the center of all activity. And to do so, it is urgent that a climate of trust and interaction between teacher-pupil be effective. According to the constructivist approach, the teacher-pupil interaction plays an important role in the development of pupils' intelligence and would therefore be beneficial for the performance of learners (Piaget, 1927). Teacher-pupil interaction or relationships play a key role in teacher's commitment and pupils positive achievements (Davis, 2003, Klassen, Perry & Frenzel, 2012, Pianta *et al.*, 2012, Wang, 2009). In a massification posture, it is not as easy to see this interaction emerge because the context is not favorable.

Methodology

Framework of the Study and Participants

This study was conducted in the public primary schools of the Municipality of Kozah 1 in the Prefecture of Kozah. It involved 129 voluntary and consenting teachers working in the said schools. This sample is made up of 59% women and 41% men. Sixty-five teachers in the sample were interviewed in order to collect information relating to massification, teacher-pupil interactions in a context of crowded classrooms. This qualitative method thus made it possible to complete the data collected from the survey.

Measuring Instruments for Variables

Bakker, Albrecht and Leiter (2011) report that the work commitment scale - the Utrecht Work Scale (UWES) - is the most commonly used. However, this scale is designed for research involving workers from the corporate sector and highly contrasting work environments. This

leads us to choose a scale of commitment reflecting the context and the specific requirements of teachers working in the classroom. In this study, teacher commitment was assessed using the commitment measurement scale developed by Klassen, Yerdelen and Durksen (2013). This scale was specially developed to measure the commitment of teachers in schools. Initially developed in English, the measurement scale of Klassen *et al.* (2013) has been translated into French using the Brislin technique (1980). It measures four of the most important dimensions of teachers' professional commitment, namely Cognitive Commitment, Emotional Commitment, Social Commitment to Pupil and Social Commitment between Colleagues. It is a 5-point Likert-type scale composed of 16 items ranked from 1 = Strongly disagree to 5 = Strongly agree. One of the items on this scale is "I'm excited at the thought of teaching". We first adapted this scale to the Togolese context to ensure its reliability and validity.

School massification was assessed in terms of the number or high or plethora of pupils regularly enrolled in a classroom during a school year. Thus, this number or class size is used as a measure of the massification variable. Class sizes were collected from each teacher surveyed and verified with school officials. This verification was necessary in order to avoid deviations due to the manipulation of class sizes for various reasons.

Data Analysis Techniques

The data collected in this research were analyzed using the SPSS and AMOS statistical software. First, the principal component factor analyzes, the Cronbach alpha analysis and the confirmatory analysis were conducted first to verify the validity of the measurement scale used in this study. The principal component factor analysis reveals a test index (KMO) which displays a value greater than 0.5 (KMO = 0.883), and the Bartlett test displays a satisfactory Khi- two index (Khi- two = 0.000). The structure of the principal component factor analysis (PCA) carried out on the sixteen items measuring the variance of the professional commitment variable demonstrates the existence of the four factors which respectively explain 45.9% (Social Commitment between Colleague: SCC) of the variance, 10.75% (Emotional Commitment: EC), 7.7% (Social Commitment to Pupil: SCP) and 6.4% (Cognitive Commitment: CC), resulting in a cumulative of 70.72% of the total variance of this variable. The Cronbach alpha displays 0.701, 0.733, 0.726, and 0.746 for the CC, EC, SCP and SCC respectively. Confirmatory factor analysis (using AMOS) to assess the validity of the measurement instrument confirmed the factor's adjustment indices. The Khi-two quality adjustment index ($df = 45$) = 240.63, with a p -value level less than 0.001. Due to the sample size of this study ($N = 129$), the likelihood ratio is sensitive to the size of the sample (Hair, Ortinau, Wolfenbarger & Bush, 2014; Haire, Handerson & Black, 1998). Thus, the commitment variable appears to be well defined (factor analysis), reliable (Cronbach alpha), and its uniformity, that is to say the uniformity of the four-dimensional scale of teachers' commitment has been certified by confirmatory analysis as shown in the figure below. Finally, the regression analysis carried out in the second part made it possible to verify the hypothesis of this research.

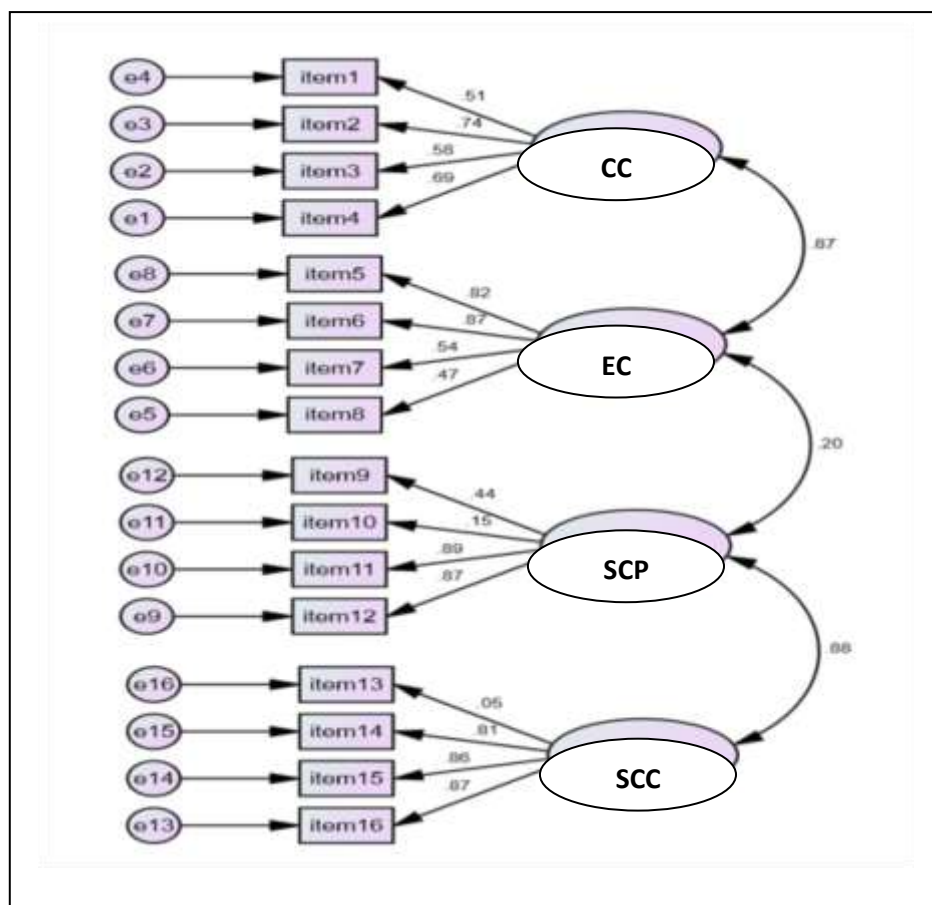


Figure 1: Dimension of the teachers' professional commitment scale

Sources: field data

Results

The purpose of this section is to analyze the data obtained from data collection.

Descriptive Analysis

A descriptive analysis was carried out in order to have an overall vision of the relationship between the sub-dimensions of the scale of commitment and massification. The results are presented in the table of the inter-correlational matrix below.

Table 2:

Inter-correlation matrix

Variable	1	2	3	4	5
Cognitive Commitment(CC)	1				
Emotional Commitment (EC)	0.683**	1			
Social Commitment to Pupil (ESE)	0.685**	0.703**	1		
Social Commitment to Colleague (ESC)	0.589**	0.571**	0.712**	1	
Massification	-0,37**	-0,45**	-0,55**	-0,37**	1

Note: significant correlation to $p < 0.01$

The data in this table of the correlation matrix indicate correlation coefficients greater than 0.35; and significant at 0.01. This shows that the four sub-dimensions which effectively

measure the professional commitment of teachers and the massification variable are thus inter-correlated.

Analysis of the Effect of Massification on Professional Commitment

School massification and teacher commitment are both variables of the same level; which allowed us to conduct the linear regression analysis using SPSS software to test our research hypothesis. The effect of school massification on the professional commitment of teachers was thus estimated by means of four regression analyzes, the results of which are summarized in tables 3, 4 and 5. Thus, the study analyzed the effect school massification on the four dimensions of commitment, namely Cognitive Commitment (CC), Emotional Commitment (EC), Social Commitment to Pupil (SCP), and Social Commitment between/to Colleague (SCC).

Table 3:

Recapitulative of the 4 model summaries

Model	R	R-two	R-two adjusted	Estimation Standard Error
1	.606 ^a	.367	.362	.36968
2	.670 ^a	.449	.445	.59559
3	.744 ^a	.554	.551	.62016
4	.609 ^a	.371	.366	.42876

Dependent variable : 1.EC, 2. EE, 3.ESE, 4.ESC, ** $p < 0,01$

The table above is a summary of the four different regression analyzes that have been conducted to assess the influence of school massification on the professional commitment of teachers in the school environment. The results indicate coefficients of correlations R-two equal to 0.37; 0.45; 0.55 and 0.37 respectively for models 1, 2, 3, 4. This means that the classroom size or the school massification explains Cognitive Commitment (CC), Emotional Commitment (EC), Social Commitment with Pupils (SCP), and Social Commitment between Colleagues (SCC) covering a percentage of 37%, 45%, 55%, and 37% respectively.

Table 4:

Summary of The Significance of The Results of The 4 Regression Analyzes

ANOVA^a

Model		Sum of squares	ddl	Average squares	of D	Sign
1	Regression	10.621	1	10.621	77.714	.000 ^b
2	Regression	38.702	1	38.702	109.103	.000 ^b
3	Regression	64.066	1	64.066	166.579	.000 ^b
4	Regression	14.518	1	14.518	78.973	.000 ^b

Dependent Variable : 1.CC, 2. EC, 3.SCP, 4.SCC, ** $p < 0,01$

Table 4 above shows the validity and significance of the four different regression analyzes conducted in this research. The data presented in this table indicates a $p < 0.01$, which means that the results obtained following this analysis are therefore significant. Therefore, they confirm the research hypothesis that school massification influences the professional commitment of teachers.

Table 5:

Summary of The Coefficients of The 4 Regression Analyzes

Coefficient ^a						
Model		Non Standardized	Standard Error	Standardized	T	Sign
		Coefficient		Coefficient		
		A		Beta		
1	Size	-.256	.029	-.606	-8.816	.000
2	Size	-.489	.047	-.670	-10.445	.000
3	Size	-.630	.049	-.744	-12.907	.000
4	Size	-.300	.034	-.609	-8.887	.000

Dependent Variable : 1.CC, 2. EC, 3.SCP, 4.SCC, ** $p < 0.01$

The data in this table illustrate, on the one hand, the standardized Beta Coefficients = -0.61 **; -0.67 **; -0.74 **; -0.61 ** respectively for the four models and the ** $p < 0.01$; and the results of t pupil $t = -8.816$; -10.44; -12.9; -8.9; the ** $p < 0.01$ respectively for the four models, on the other hand. This reveals significant results for the four models in this study. Analysis of the table also shows standardized negative Beta coefficients. These results thus show that massification of schooling negatively influences the professional commitment of teachers in the school environment.

Discussion

The main objective of this study was to analyze the influence of massification of schooling on the professional commitment of teachers in public primary schools in the Municipality of Kozah 1 in the Prefecture of Kozah in Togo.

At the end of the investigations, the results obtained from analyzes confirm that school massification has a negative effect on the professional commitment of the teachers who participated in the study. The coefficients of correlations R^2 of the four regression analyzes are negative, which means that school massification has a negative influence on the four dimensions of commitment, namely: cognitive commitment, emotional commitment, social commitment with pupils, and social commitment between colleagues. Therefore, the professional commitment of teachers depends in part on class sizes. Massification appears to be a factor which erodes the professional commitment of teachers. Thus, the larger the class size, the less the professional commitment of teachers. This is explained by the fact that in a context of school massification, the teacher worries more at work, he spends a large part of his time establishing silence and order in the classroom in order to be able to impart his lesson. This results in fatigue, especially burnout or exhaustion and discommitment from work (Pianta, Hamre & Allen, 2012; Hakanen, Bakker & Schaufeli, 2006). Massification of schooling therefore affects teachers' professional commitment, which translates into poor personal investment in work. Teachers supervise more their pupils than they teach them. In addition, in a context of massification, it is not so easy to see interaction emerge. Teacher-pupil interaction is reduced or almost non-existent. Whereas, interaction not only allows knowledge to be transmitted, but it also makes it possible to verify whether the information transmitted is understood and, moreover, gives the child confidence, which, according to Guillemette (2006), determines the quality of the teaching conveyed. These results overlap with those of Dauber and Epstein (1991), Deslandes (2001); Paquin and Drolet (2005). In our

current situation of plethoric classroom sizes, the pupil is engulfed in the mass and it would be difficult for the teacher to single him out of this situation and, therefore, all his efforts would be lost. The teacher will gradually disengage from his noble mission, that of bringing all pupils to success.

As with any research, this study has also got shortcomings. The main limitation is the sample size for this study. Indeed, considered as small or insufficient, it can constitute a handicap to the generalization of the results of this study. In addition, this study failed to check whether the data collected is free of any bias due to the effect of the sociability of the respondents, i.e. the tendency of the respondents to provide positive answers to the questions during a survey.

Conclusion

The Education For All policy, implemented by most countries south of the Sahara, including Togo, has not had adequate support measures. This leads to overcrowding in classrooms with various ensuing consequences such as the decrease in the level of personal involvement of teachers in their profession.

In order to improve the academic performance of pupils, it is very imperative that teachers are genuinely committed or devoted to work alongside the pupils and that they give the best of themselves. To do this, it is therefore essential to stimulate the attitudes of teachers by focusing on this phenomenon of massification of education in order to offer quality education for young people, tomorrow's future.

It is possible to put an end to the phenomenon of school massification by making significant investment in the building of new infrastructure and the recruitment of new teachers, investment that African states often lack the will to allocate funds to the education sector. If it is impossible to find an immediate solution to this phenomenon, school massification could be considered as an opportunity for educational researchers. It is an opportunity for all stakeholders including teachers and researchers to innovate, to develop new techniques, new strategies, and new teaching methods. Thus, future studies may be interested, on the one hand, in a national analysis of the impact of massification of education on the behavior of teachers, and on the other, to develop new techniques or pedagogies in a context of school massification.

Ultimately, the present study allowed to enrich, theoretically, the togolese scientific literature with the results obtained, which show that school massification has a negative effect on professional commitment of teachers. In practical terms, this study challenges the authorities in charge of the educational system. The teaching profession is a complex one, and school massification further disarms teachers. To do this, policies must be focused, on the one hand, on the building of infrastructure to decongest classrooms and, on the other hand, the regular and sufficient recruitment of teachers to cope with this school massification and allow teachers to be always engaged in this noble profession.

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