

Adjustment of School Rythms and Student Performance

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Abstract: Far from wanting to call into question the previous studies on the relation between the management of school time and student performance, the present investigation attempt to answer the following question: Does the organization of school time have an influence on academic performance? Indeed, we notice that the level of students especially in primary education remains low and even in the CEMAC [CEMAC : Communauté Economique et Monétaire de l'Afrique centrale] sub-region compared to that of learners in countries like: Canada; Finland and England to name only those which have an educational system primarily focused on the needs of students. This calls into question the quality of the Cameroonian system which does not take into account the rythms of the students as recommended by the chronobiologists; which make it difficult for students to assimilate learning to ensure academic success. When we know that the majority of secondary school students have difficulties in receiving lessons in particularly in mathematics and language, it must be said that the problem would be at the level of basic learning at the primary level which has the mission of reducing or even eliminating these difficulties. In order to measure the impact of the adjustment of school rythms on the performance of the students, this experimental type research was carried out on sample of 60 students divided into two equal groups, namely an experimental group and a control group. The results allowed us to conclude that the adjustment of school rythms has an impact on the performance of students.

Keywords: School rythms, school performance, students

1. Introduction

Facts that remain difficult to grasp in formal education are academic performance, which is measured through the results obtained by students. In the perspective of improving the quality of training provided to learners in Cameroon , only the ratio of teachers/pupils, pupils/class is taken into account; the school environment the qualification of teachers, the availability of teaching materials.... However, the quality of training is also based on the management of school time, and therefore on the development of daily and weekly time tables. The organization of school time is of the utmost importance in the education of child. It must be said that in Cameroon, the education system really does not yet take account the biological rhythms of students. The organization of school timetables at the level of primary education provides for time slots of thirty to forty-five minutes for lessons, but we note that the teacher because , it should remembered that the majority of classes do not takes into account that a single teacher who seems very often to modulate the durations of different lessons at will and the students sometimes find themselves with very heavy days , but the children have own rhythms varying from one individual to another and therefore you should always try as much as possible to find the right balance. Children's rhythms vary from period to period during the day with times of high and low concentrations; also their physical dispositions decrease over the hours and therefore, their intellectual activity cannot be maintained at the same rate during the whole day. It is imperative not to put aside the parameter of fatigue, the physiological and mental dispositions that arise with the hours and which lead to a decrease in attention in children in a learning situation during certain activities. Activities time slots by the teacher can thus lead to poor learning in the child. A look the At the work of Dottrens (1964)¹ put the teacher at the center of

the management of his class and of the various activities ; in the same sense Mercaire (1993)² thinks that the way in which the teacher behaves has a determining role on the level of learning of learners . the teacher must therefore be a good manager and able to follow the rhythms of his students . He must also communicate the difficulties encountered to the school administration, which should be responsible for transmitting to educational policies for restructuring to the needs of the organization of time at school.

Testu (2000)³ and Montagner (2003)⁴ in their studies have clearly demonstrated the existence of a significant link between school time management and academic performance. These studies were based on the importance to be given to the development of timetables; which largely falls within the competence of guidance counselors . it should be noted that the guidebook of the guidance counselor⁵ stipulates « the assessment of the content of the programs and teaching methods must be made in relation to the psychological characteristics of the students" while indicating that this is the competence of the counselors of 'orientation . The level of the pupils strongly depends on the way in which time is organized as well as on the respect of the rhythms of the pupils. Suchaut (2009)⁶ already stated that the way in which time is used has a significant effect on the learning outcomes of learners at primary level.

² Mercaire, F.,(1993). *Notre beau métier*, Versailles, Les classiques africains.

³ Testu, F., (2000). *Rythmes de vie et rythmes scolaire*. Paris : Masson

⁴ Montagner, H., (2003). *Les rythmes de l'enfant et de l'adolescent*, Stock Laurence Pernoud

⁵ Houyoux ; A.J., (1971). L'orientation scolaire au Cameroun

⁶ Suchaut, B.,(2009). L'organisation et l'utilisation du temps à l'école primaire : enjeux et effets sur les élèves. Irédu –CNRS et Université de Bourgogne.

¹ Dottrens, R., (1964). *Tenir sa classe*, Yaoundé, CEPER

The central question of this study is therefore whether the adjustment of school rhythms has had an impact on academic success. Specifically, do school timetables influence the quality of learning? Does the duration of school activities have an impact on student achievement? The aim of this research is to be able to determine the influence of the development of school rhythms on student performance.

Case Study

In the 2015 report on the challenges of education for all (EPT)⁷ it was a question of providing an overview of the quality of education in Cameroon, since the adoption of the EFA strategy in 2000, the main objectives of which could be summarized in these points:

- The reduction of existing inequalities hampering access to education for all children of school age;
- The Improving the quality of education in the countries participating in the Dakar World

Forum in April 2000, by promoting the education of the greatest number

The purpose of this report was to report on the implementation of these objectives in Cameroonian society; has education in Cameroon improved and how? It appears from these evaluations that the quality of education in Cameroon has nevertheless seen some progress. Progress was noted in the enrollment and completion rate for preschool, primary and secondary; reducing gender disparities and improving the quality of teaching and student support.

It is true that significant progress is being observed because, with regard to the quality of teaching and pedagogical supervision in Cameroon, remarkable efforts have been made in terms of recruiting qualified teachers (at the primary level from 53.11 to 67.01% between 2007 and 2010; and in secondary 22.06% to 41.04% between 2001 and 2010) and the pupil / teacher ratio (from 63 pupils for a teacher in 2000 to 45 pupils for a teacher in 2001 at the primary level). Regarding learning outcomes, the level have been clearly seen on the rise according to various analyzes over the past few years even if it is not yet at the top. Assessments of student achievement in 2013, taken from PASEC 2005 results, show that barely a quarter of primary school students pass language and math tests. The same is true for the first cycle of secondary education, which suggests a low quality of training and learning with a retention rate of only 70% in 2012 due to repetitions and dropouts. It should be noted here that most dropouts and repetitions result from learning difficulties encountered by students during their training, among other causes. Some students have difficulty reaching the next level because of poor cumulative performance in the basic learning subjects, namely Mathematics and French, which for the majority constitute, according to the teachers' testimony, the subjects recording the highest percentages of school difficulties.

As regards the consolidation of learners' achievements in primary education, according to the report of 'UNESCO⁸, the objective of primary school is to "Provide the basis for lifelong training and development of children on which other levels of education and training are built"⁹ in other words, it has the role: "to inculcate the essential learning tools (reading, writing, speaking, counting, problem solving) and the fundamental educational contents (knowledge, skills, values, attitudes)"

The Cameroonian education system is characterized by a high repetition rate in the primary cycle, ie 28% in the French-speaking sub-system. For teachers, learners are not concentrated in class because, due to their young age, they are generally restless and have a strong attraction to games, which is why it is difficult to maintain their attention and keep them focused throughout the day and receptive to teachings. These behaviors represent variables that can disrupt the acquisition of knowledge by learners and therefore their returns. However, even if failure is partly the learner, it is not entirely the learner. In other words, the responsibility for failure cannot be removed from the learner because the performance of the pupil depends on many other factors that are not dependent on him. It is in particular the quality of the teaching, the qualification of the teachers, the availability of the didactic material the school environment among others without forgetting one of the most important parameters the arrangement of time including the school calendar, the daily schedules and weekly.

We can quickly see the variations that the human apparatus undergoes during the day and even more in the smallest. Likewise, these changes are observed during the school week with favorable days and unfavorable days for teaching. The daily schedule established by Testu (1996)¹⁰ shows that in a school day there are two periods of high concentration in primary school learners and two periods of low concentration. For him the variation of school rhythms during the day is as follows

- 8:30 am-9:30am: Period of poor performance with a high frequency of yawning due to lack of sleep or late awakening;
- 9:30 a.m. to 11:30 a.m. / 12 p.m.: (with a break at 10:30 a.m. for the break) this is the phase of better concentration, of the best performance in tests and various school activities
- Attention and concentration are optimal during this time. There is an increase in body instability between 10 a.m. and 11 a.m., which allows students to maintain their level of vigilance, but which suggests that they are at the limit of their possibilities;
- 1:30 p.m. to 2:30 p.m. / 3 p.m.: Significant decrease in vigilance and performance, Period not conducive to activities requiring high intellectual mobilization;
- 3 pm-4:30pm / 5pm: there is a further increase in performance; it is another period of intellectual efficiency.

⁸ UNESCO : United Nations Educational, Scientific and Cultural Organization

⁹ UNESCO.,(2008). *Rapport de suivi sur l'Éducation Pour Tous en 2015, un objectif accessible ?* Paris : UNESCO

¹⁰ Testu, F., (1996). *Aménager le temps scolaire* Paris, Hachette

⁷ « Examen National de l'Éducation Pour Tous : Cameroun »

As for the weekly organization of school activities, we can remember that Monday appears to be a difficult day in terms of performance or intellectual output for students regardless of their age. The break with the weekend seems to have a negative impact on the day after it, especially Monday. Montagner (2003) thus materialized the following calendar as conducive to the attention and concentration capacities of the pupils:

- Monday is a difficult day because it is characterized by disorganized behavior, a shift in biological rhythms and poor scores in the tests offered, especially in the morning;
- Tuesday and Thursday are comparable days marked by good performance and balanced behavior;
- Wednesday appears to be a beneficial day, a day where the pupils, especially the youngest, present a regularity of biological rhythms and even at the level of behavior and communication.
- Friday is very variable according to the students because, located at the end of the week. It accumulates fatigue from other days of the school week, which can affect the abilities of the most vulnerable students. In general, it can be considered a good day for those students who perform better on tests. They are very often the biggest. For the little ones, it is very often difficult.

Taking a break from this work helps to understand the need to give pride of place to both the qualitative management of school time and its quantitative management. Time management is an important parameter of academic performance. Whether on a purely managerial level or from the angle of Chronopsychology, it is in the interest of paying more attention to the organization of school time. It is also necessary to take into account the rhythms of the pupils for a better training. Taking into account the results in terms of optimal allocation of the duration of lessons in order to facilitate learning. Particular emphasis must therefore be placed on the daily and weekly adjustment of the rhythms of the pupils for a better reception of lessons and therefore to increase the percentage of the school success rate; this also allows according to Touitou and Bégué (2010)¹¹ to maintain the health of students who do not function as robots. For him, the organization of school time is an important parameter of the mental and psychological health of learners.

2. Theory of the Study

Several management theories or even psychology adapted to time management help explain the importance to be given to school rhythms for better student training and by extension for an increasingly increasing success rate. The theory of Testu François on the adjustment of rhythms in children in school situations indeed allows us to support this idea.

Testu established the following law: after a "dip" during the first hour of class (between 8 a.m. and 9 a.m.) the level of production improves until the end of the morning when a peak is located (between 11 a.m. and 12 p.m.) it decreases after lunch then, rises again more or less depending on the

¹¹ Touitou, Y., Bégué, P., (2010). Aménagement du temps scolaire et santé de l'enfant. Bull. acad. Natl. med. Tome 194

age of the learner. Testu establishes that regardless of the origin of the children and of school lifestyles, there are two moments recognized as difficult: the beginnings of the morning and the afternoon and moments favorable to learning which correspond to the peaks of variation intellectual activity from the end of the first hour of morning class to the end of the morning (between 9 a.m. and 12 p.m.) and during the afternoon (1:30 p.m. to 4:30 p.m.). This theory states that the rhythmicity of changes according to the age of the learners and according to the levels of study. By studying the children of the following groups: 6-7 years, 8-9 years, 10-11 years, he concludes that during the school day, the level of performance rises at the end of the day for the three groups of age; in the afternoon, the youngest (5-9 years old) perform poorly while the oldest pupils in the middle classes (10-11 years old) obtain results equal to those of the morning. During the afternoon, the resumption of intellectual activity is proportional to age, which means that it is later for students for older students in middle school. It remains weak in the youngest of the preparatory course and increases in the older ones. Daily variations in mental performance change with age. It is from the age of 11 that the moments of lower attention are in the early morning and afternoon, and the periods of increased attention are finally in the morning and afternoon, and the periods of increased attention. are late morning and to a lesser extent late afternoon.

As to the influence of the type of efficiency, Testu states that there are patterns of variation in mental efficiency according to the skills required for performing a task. We observe a rise in intellectual and reflective capacity at 11 a.m. and a very pronounced drop after lunch with regard to the verbal series and for the brick test and a resumption of activity in the afternoon at a significantly lower level equal to that of 11h. For bricks and verbal series, Monday is the worst day while Friday is the best. As for the verb agreement tests, they do not show real variations over the course of the day or week. It is the same for the operational tests to be completed. Thus Testu concludes for tests requiring memory, such as verb chords, dictation, problems, one does not observe periodic variations. The fluctuations observed in brick and verbal series tests can be explained in relation to the usual. These variations are due to the fact that this is a different type of test from school exercises. The level of memory used and habit influence the level of test performance. The exercises which require a greater use of memory and which in their construction involve the usual treatment schemes have less impact on the periodic rhythmicity of school performance

3. Research Hypothesis and Study Methodology

3.1 Research Hypothesis

This article is about trying to show that adapting school time to student rhythms would promote better learning and therefore better academic results. In fact, the main objective of each country when adopting an education system is to train the type of man who meets the needs of the society. This good training thus requires taking into account several parameters, many of which have been mentioned above,

namely the qualification of teachers, the availability of infrastructure and materials, the quality of the training environment, respect for student / class ratios, students / teachers and others. While these parameters are more or less taken into account in Cameroon, there is still much to do to take into account school rhythms in the development of timetables in order to improve the quality of the training of learners. Including this parameter in the imperative needs for the supervision of learners would undoubtedly make it possible to reduce poor academic performance even if many other parameters come into play to explain the school failure. Thus hypothesis (1) states that the daily arrangement of learning hours more suited to the rhythms of the students promotes good academic performance.

As the rhythmic variations also change with the days of the week, hypothesis (2) poses that a weekly arrangement more suited to the rhythms of intellectual activity would promote better academic performance.

For Ngwa, (2013)¹² school rhythms must be adapted for better concentration of learners. Beyond a certain period of activity, it is clear that the young learners begin to lose interest and we can see a kind of general fatigue, restlessness, lack of concentration in the class. School is the setting in which the formal education of children takes place. They spend up to seven or even eight hours of time there a day because the start time of classes is generally set at 7:30 am and end at 3:00 pm. Students therefore spend most of the day there during the school week with the exception of Wednesdays when classes end earlier at 12:45 p.m. In Cameroon, a learner from kindergarten to secondary has only two breaks: the short break which lasts 15 to 20 minutes and the long break which varies between 30 and 45 minutes depending on the level. And we know that it is extremely important for young students to relax from time to time. Thus, between lessons, breaks and other things, it is necessary to ensure the development of the students, from which hypothesis (3), a more suitable teaching period for each school activity would make it possible to optimize student performance.

3.2 Methodology of the study

To carry out this research we opted for an experimental method followed by a quantitative analysis. The administration of the test was done in three stages, the pre-test which was carried out through two tests lasting thirty minutes each on our two control and experimental groups of the CE2 classes constituting our population of study; then the experiment which consisted of observing the two groups during a Mathematics lesson according to the timetable and then during a different time, for a different duration and for a day other than the usual Which was done for two weeks. Finally, the post-test which consisted of repeating the same pre-test tests for our two groups, the first for 30 minutes and the second for 50 minutes in order to compare the effects produced on the performance of the students.

¹² Ngwa, V., (2013) *Adapter les rythmes scolaires pour optimiser l'attention la concentration des élèves*. In recueil des textes en pédagogie

3.3 Data analysis technique

We opted for the quantitative analysis of the data from the experiment, the reduced deviation test (Z) because it is a descriptive experimental case. The Z test thus allows us to compare the scores obtained by each of the two groups. It is therefore a matter of comparing the observed mean (experimental sample) to a theoretical mean (control sample). The goal is to see if there is a significant difference between the two averages. The test has the following formula:

$$Z = \frac{X1 - X2}{\sqrt{\frac{S^2_1}{N1} + \frac{S^2_2}{N2}}}$$

Z denotes the test;

X1 or XGE: the mean of the experimental group;

X2 or XGT: control group mean

S²₁ or S²_{GE}: The variance of the experimental group

S²₂ or S²_{GT}: The variance of control group

N1 or NGE: this is the number of the experimental group

N2 or NGT: the number of control group

For the hypothesis test, the steps are as follows:

- 1) Formulation of the null hypothesis (H₀) and the alternative hypothesis;
- 2) Determination of the margin of error. We set the margin of error at 5% that is $\alpha = 0.05$;
- 3) Calculation of the Z test;
- 4) Determination of the critical value: the degree of freedom d.d.l = (N₁ + N₂) - 2
- 5) Decision rule:
 - If Z calculated > Z read, H₀ is rejected and H_a accepted
 - If Z calculated < Z read, H_a is rejected and H₀ accepted
- 6) Conclusion

3.4 Presentation of the results

3.4.1 At pre-test

Table 1: presentation pre-test results

Items	Average	
	Experimental group	Control Group
hour	1,43	1,3
day	1,43	1,3
duration	4,1	4,33

It emerges from the pre-test that whatever the item, the results are substantially identical, as well for the experimental group as for the control group. This shows certain homogeneity of the two groups. In other words, this homogeneity is not only due to age, class, but more so to the rhythms of the students, to their level of concentration.

3.4.2. Presentation of the results of the experiment

Item 1 the daily arrangement of learning hours

Table 2: Distribution of experimental group post-test results

Notes/20	ni	ci	nici	ci-XGE	(ci-XGE) ²	Ni(ci-XGE) ²
[0-5[	5	2,5	12,5	-7,83	61,36	306,81
[5-10[	8	7,5	60	-2,83	8,03	64,22
[10-15[	12	12,5	150	2,17	4,69	56,33
[15-20[	5	17,5	87,5	7,17	51,36	256,81
Σ	30		310		125,44	684,17

The distribution presents the post-test data regarding the daily arrangement of the children in the experimental group. Looking at the distribution shows that 17 out of 30 students scored over 10/20, or 56%. This states that the daily adjustment seems to have a positive effect on efficiency in Mathematics because more than half of the group obtained the required average. The mean obtained in the post-test of the experimental class for this item is equal to 10.33 with a variance equal to 22.81. The test took place on a Thursday which according to Testu appears to be a favorable day for learning and between 10 am and 10 am which is a period of high concentration which would explain this trend.

Table 3: Distribution of control group post-test results

Notes/20	ni	ci	nici	ci-XGE	(ci-XGE) ²	Ni (ci-XGE) ²
[0-5[	11	2,5	27,5	-5,333	28,444	312,889
[5-10[	10	7,5	75	-0,333	0,111	1,111
[10-15[	5	12,5	62,5	4,667	21,778	108,889
[15-20[	4	17,5	70	9,667	93,444	373,778
Σ	30		235		143,778	796,667

Examination of the data from the control group at the post-test shows that the results are concentrated around the intervals [0-5 [; [5-10 [. That is 70% of students. This is significantly lower than the results of the students in the experimental group. Note that the average is 7.83 for a higher variance, i.e. 26.56. Adjusting the time slots would therefore have a significant impact on children's level of attention and therefore on academic performance.

Item 2 : weekly layout

Table 4: Distribution of experimental group post-test results

Notes/20	ni	ci	nici	ci-XGE	(ci-XGE) ²	Ni (ci-XGE) ²
[0-5[	5	2,5	12,5	-7,00	49,00	245,00
[5-10[	13	7,5	97,5	-2,00	4,00	52,00
[10-15[	7	12,5	87,5	3,00	9,00	63,00
[15-20[	5	17,5	87,5	8,00	64,00	320,00
Σ	30		285		126,00	680,00

It emerges from the table above that 12 children or 40% records the required average which is 10/20. The weekly adjustment would seem to have a positive impact on the level of mathematics learners. The mean obtained at the pretest for this group was 9.50 and the variance was 22.57

Table 5: Distribution of post-test results to control group

Notes/20	ni	ci	nici	ci-XGE	(ci-XGE) ²	Ni (ci-XGE) ²
[0-5[	12	2,5	30	-5,00	25,00	300,00
[5-10[	9	7,5	67,5	0,00	0,00	0,00
[10-15[	6	12,5	75	5,00	25,00	150,00
[15-20[	3	17,5	52,5	10,00	100,00	300,00
Σ	30		225		150,00	750,00

Looking at the data from the control group at the post-test, examining the data shows that the performance is almost the same. Indeed, for the two groups, the modal class is the interval [5-10 [, ie 18 pupils for 60% for the control group and 21 pupils or 70% for the experimental group. We can deduce that the arrangement of the learning days does not seem to have significant effects on the level of concentration of the learners; however, we note all the same a slight advance of the experimental group over the control group

(40% against 30 %). The mean obtained by the control group, i.e. 7.5 with a higher variance (25) shows that even if there is not a very significant effect, the weekly adjustment still has a positive effect on the level of students.

Item 3 : Adjustment of the learning period

Table 6: Distribution of post-test results on the experimental group

Notes/20	ni	ci	nici	ci-XGE	(ci-XGE) ²	Ni (ci-XGE) ²
[0-5[	5	2,5	12,5	-6,67	44,44	222,22
[5-10[	13	7,5	97,5	-1,67	2,78	36,11
[10-15[	9	12,5	112,5	3,33	11,11	100,00
[15-20[	3	17,5	52,5	8,33	69,44	208,33
Σ	30		275		127,78	566,67

The table above shows that 12 students register the required average. The test was carried out on a Tuesday between 10 a.m. and 10:45 a.m. over a period of forty-five minutes, or fifteen minutes more. It is clear that this additional time allows the student to concentrate better and produce better results with regard to the average obtained (9.17) higher than that obtained in the pre-test and with a variance of 18.89 .

Table 7: Distribution of the results of the post test on the control class

Notes/20	Ni	ci	nici	ci-XGE	(ci-XGE) ²	Ni (ci-XGE) ²
[0-5[	10	2,5	25	-4,50	20,25	202,50
[5-10[	14	7,5	105	0,50	0,25	3,50
[10-15[	5	12,5	62,5	5,50	30,25	151,25
[15-20[	1	17,5	17,5	10,50	110,25	110,25
Σ	30		210		161,00	467,50

Reading this table establishes that only 6 learners were able to obtain the required average, 10 learners recorded an average less than or equal to 5/20 while for the experimental group, only 5 students had a mark less than or equal to 5/20 this which explains the difference observed on the impact of the volume of time: 60% between 00/20 and 10/20 while for the control group we recorded 80% of students in this interval. In addition, if 12 students succeed in obtaining the average in the experimental group on the same discipline, ie mathematics. Only half or 6 achieved it in the control group. This sufficiently shows that the duration of an activity has an impact on the student's performance.

Thus, the results obtained at the post-test according to the various items are recorded in the following table:

Table 8: presentation of post-test results according to items

Items	Average	
	Expérimental Group	Control Group
Hour	10,33	7,83
Day	9,50	7,50
Duration	9,17	7

It can be seen on reading this table according to the different arrangements that the average of the results obtained in the tests by the experimental group is each time higher than that obtained by the control group.

4. Interpretation and Discussion

Following the experimentation, our three research hypotheses (HR) thus formulated "HR1: the daily arrangement of learning hours more suited to the rhythms of the students promotes good academic performance; HR2 the weekly arrangement more adapted to the rhythms of intellectual activity would promote better academic performance and HR3, a more adapted teaching period for each school activity would allow to optimize the performance of the pupils "were subjected to an analysis through the various data collected in the field. The results obtained from this analysis allowed us to conclude that the organization of school time according to the rhythms of the students has a positive impact on academic performance.

For HR1, it emerges that the choice of a time slot adapted to the lessons has a positive impact on the quality of the training. From the analysis, we noted during the experiment that by carrying out our Mathematics test at the end of the morning between 10 a.m. and 10:30 a.m., we recorded 17 students who obtained the average for the experimental group while only 9 learners obtained the average. in the control group at another time. This allows us to state that daily adjustment has a positive effect on yield. Moreover, the analysis results are clear, calculated Z (2.5) greater than the Z read (1.96)

As for HR2, analysis of the data does not accurately show the existence of a significant link between weekly rhythm adjustment and academic performance. Indeed, it was found that there was no significant difference between the means recorded by the two groups after the experiment. 21 learners obtained a score greater than or equal to 10/20 for the experimental class and 18 in the control class, i.e. just three students less. This leads us to believe that the link between the weekly adjustment is weak, however, the calculation of the Z test revealed that the Z read (1.58) is less than the calculated Z (1.960) which leads us to the validation of our hypothesis.

For HR3, the analysis shows a marked improvement in test results for the experimental group. This increase is characterized by a frequency of 60% for the number of learners who obtained the average of 10/20 in the control class against 80% in the experimental class. The data analysis is clear, calculated Z (2.02) greater than the Z read (1.960). In other words, the length of an activity has a significant impact on student results.

5. Suggestions and Perspectives

With a view to reducing poor performance in favor of good academic performance, some suggestions are addressed to public authorities and teachers

To public authorities

- Take into account the rhythms of learners in the development of the school calendar;

- Review and adapt to the needs of learners according to levels, the hourly volumes allocated to each discipline for better student learning;
- Think about an organization of time relating to the qualitative dimension of time; of student learning, a central parameter in terms of pedagogical effectiveness. This would certainly make it possible to produce better results for the students;
- Work with those in charge of time management within schools to register repetitive complaints from teachers related to student behavior in order to detect where the fault lies and try to resolve the problem;
- Develop the school environment

To teachers

- Respect the program established by the school administration;
- Avoid as much as possible adjusting the duration of the various school activities;
- Observe the movements of the pupils during the various lessons in order to communicate them each time to the administration for a possible modification of schedules within the establishment, of the class according to trends;
- Take into account the day and time parameters for the teaching of each discipline when drawing up timetables, which should be able to be modified if necessary after a report to the administration.

It is clear that we have been not able to address all the parameters of the organization of school time for a better training of learners and therefore to ensure academic success because many other factors can be taken into account and be the subject of further investigations " is for example to deepen the study on the influence of the management of time by the teacher on the performances of the pupils, the role of the guidance counselor in the management of school time and many other points which have been mentioned in this article

6. Conclusion

This research focused on the organization of school time and student performance in primary education. It was up to us to validate or not the existence of a significant association between the two variables of our study. Three research hypotheses were formulated, namely: HR1: the daily arrangement of learning hours more suited to the rhythms of the pupils promotes good academic performance. HR2: a weekly arrangement more suited to the rhythms of intellectual activity would promote better academic performance and HR3 a more suitable teaching time for each school activity would optimize student performance. The analysis of the data allowed us to verify and validate the three research hypotheses and thus conclude that there is a significant link between the adjustment of school rhythms and the performance of learners in other words the academic performance. depends in part on the development of school rhythms because, it should be remembered that many other factors contribute to the training of students and therefore to the quality of training, learning and academic performance.

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