# An Investigation Study Between Two Genders, Public And Private Schools, Through The Achievement Of The Pupils In The Exact Sciences: A Case Study Of Selected Secondary Schools In Conakry, Guinea 

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#### Abstract

We are in a changing society through which the equality of boys and girls has become a major scourge. In this study, we demonstrated in the first step, a comparative study between the scores of boys and girls in three different subjects (mathematics, physics and chemistry) at secondary level. The second was to conduct a survey through a questionnaire on the satisfaction of parents on the two types of schools (public and private) and their realization in the exact sciences. The investigation put into account the fact that some high schools are selected randomly in the capital Conakry after their preparatory examinations. The first comparative method used is descriptive and explanatory design based on a sample of 1,400 school students terminal (TSM and TSE) in three schools in the capital. From the results obtained, the level of achievement for girls in exact science is still weak as well as that of students in public schools. Their levels must be improved. To conduct this study, we randomly selected 300 students out of the total population of 1866 students .In addition 400 parents were questioned about the schools, 200 of each type. We chose the Student t-test to test the hypothesis of equality between the two types of comparisons (girls and boys, public and private schools). Indeed, the results of this study show a sign of weakness in the education of girls compared with boys and dominance of private schools over public schools. According Cronbach's alpha surveys of parental satisfaction is 0.962 and 0.899 , respectively (private and public). The equipment used by the researcher for data analysis is SPSS.


Keywords: Preparatory examinations; exact science; student test; SPSS

TSM (Terminal Science Mathematics) and TSE (terminal Science Experimental) are the last classes of high school before of entrance at the university in the level of experimental and exact series.

## Background

Nowadays, a more rapid increase in the rate of enrolment of girls and boys was noted in the country mainly at all levels of the education sector with the important number of the private schools particularly in the capital Conakry. In Guinea, the teaching of the exact sciences had become a very important option for girls for instance Gloria Ladson-Billings says: « Mathematics education has been heralded for it is leadership role in the U.S. school reform effort » (Stein, Grover, \& Henningsen, 1996; Grant, Peterson, \& Shojgreen Downer, 1996). Today, equality between boys and girls has become a major scourge plaguing the world, particularly in developing countries, and also in the exact sciences such as mathematics, physics and chemistry which is due to the general development of the science. In the society today girls are look at as second class citizens, which does not help nature their careers in sciences. Like many researchers claim that education as a whole requires motivation, commitment, and all of our cognitive factors. This is to support the idea to helping education; we should not focus on a biological learner, but his or her powers, performance and intrinsic motivations to reach the end tunnel. It is important to welcome the development of a country in the field of educational economics and especially in all other areas of development as said by Kacou Amoin Elise : << The source of economic wealth and the development of a country is based on the capacity and the quality of men and women >>. In Guinea, public schools tend to lose their values because of the number of private schools nationally. After interviews of about $80 \%$ of pupils show that they all want study in private schools but lack financial. The authorities must take steps to annihilate this scourge which begins to develop little by little in the country. Both types of problems are major factors that can dominate the development of the educational system in a country. So now the purpose of members of the educational system is to eliminate the disparities in gender as supported by EFA (education for all). The objective was to eliminate gender disparities in primary and secondary education in 2005 if possible and at all levels of education by 2015 at the latest (one, 2001).This is really a problem that also concerned the UNESCO through multiple conferences worldwide as noted by J.B. DE LA SALLE: Despite all the efforts made by UNESCO and the different conferences of African Ministers of education, this sector is a concern in West Africa. Solution attempts are not lacking (JB, 2012). The purpose of this article is to determine whether the current research allows us to answer two questions. Thus in this study, we had to put in evidence of two
types of comparison. The first is to see the level of education of girls and boys across the three subjects mentioned above in the five larger schools of the capital. The second is to know the levels of pupils in these establishments through the two types of school (public and private) in exact sciences. The two types of comparisons allow us to know, the constraints related to the learning of the exact sciences, the behavior of teachers with education members on the equality of the two categories of students on the exact sciences in learning and strengthening of equal opportunities, through our surveys on the field. Especially the role played by parents which is considered a key factor for the success of children in school. As it was said by some authors, research and experience have shown that student achievement is often closely aligned to the socio-economic status (SES) of the family, i.e. the higher the SES the higher the level of student achievement (Coleman et al., 1966; Hanushek, 1986; Jencks, 1972; Lamendola, 2002; The Plowden Committee Report, 1967). In Guinea, there are gender disparities at the education level particularly in the exact sciences, the reinforcement of girls’ student levels and public schools, whose we observed that there is a small significant difference through our analysis in these big establishments.

This research is based on two main objectives allows authorities, national and international organizations to address that problem which develop small by small in the country and especially in most of African countries. In Guinea, in education we observed a percentage rate of private schools very high compared to public schools especially in the capital.

## Literature review

The goal of this research was to know it always exist of inequality between the two types the boys and girls, and also the public and private schools in the country. In his book entitled the traditional education in black Africa: scope and limits, SAWADOGO, o. (2003), quotes by Pascal student, focuses on the trends and options, this is to explain in a diagonal way, reading education and its importance in development such as the African developing countries. << The field of education is the cornerstone of the construction of its future for any company. Education translated the trends and present options in society and at the same time it constitutes a process of projection in the future >> (Pascal MUKENE, SAWADOGO, O. (2003)). To obtain a complete understanding of the problems of inequality and the contributions of authorities, various studies have been analyzed and reviewed through the achievement of students, field survey and the performance of girls and Public schools during national examinations. The rather share journals on literacy have alluded to the case of young girls. This allowed granting an interest within the objective of organizations to international and especially regional to lay off a faster process in certain area of the lives of
women. In this article we will also point out precisely in the educational setting that there was also the assistance and participation of institutions such as United Nations, UNICEF, the World Bank and NGOs at the primary and secondary level in the school setting. The Guinean National Education made the promotion of gender equality in 80 years, free access of girls to education and their retention in school and transition between different levels of education, but still there were still significant barriers through the quality of education, discrimination. Thus members of the Government are asked to redouble their efforts to allow the girls to be on the same footing of equality than men in all levels of social life. As Marc PILON said "whatsoever on the occasion of the various global conferences (on population, development, the environment, women, etc.) or through international organizations (UNICEF, World Bank, UNDP, FAO, etc.), speeches have stopped to put emphasis on the importance of women and education in the development process"( Pilon, Marc, 1996) According to statistics, the world today has 1.3 billion poor people, $70 \%$ of whom are women who do not have access to education means financial, cultural or social errors; for the African case, based on research on the ground, there are nearly $64 \%$ of the illiterate adult women. This is why the United Nations speaks of "the MDG 2015". According statistical results very thorough on the case of sub-Saharan Africa during the last decade, enrolment in nursery school at save a lot over 4.6 million, which is considered worldwide as the enrolment rate the lower and this are especially the poorest considered people who have a very small chance to access education . Most of researchers were worked about inequalities between boys and girls in educational system. We noted that the results of this comparison between the two genders at the level of the three subjects need to be improve, our assumption has proved that there is a significant difference between the performance of boys and girls on their averages in these three subjects. Therefore we note that through the efforts made by the authorities, parents of students and also through contributions from teachers on the exact sciences should not be an obstacle for girls. Zazzo, Bianka girls are not smarter than boys but they know better use their intellectual resources (Zazzo, Bianka, 1982). Bandele 1988 had also found that there was no significant difference between the performance of male and female students in mathematics at the level of their performance (Bandele, S.O. (1988).Through at the development of science no attitudes and behaviors may affect the youth for the understanding and learning of sciences had marked Omirin (1999) and Adebule (2002) who found there was no significant difference between the marking of students of some instruments developed to measure the attitude and anxiety towards mathematics respectively). Teachers are well informed about the level of young girls in the exact series. They are obliged to favor them to obtain a well-balanced
result. Nowadays schools play a role at the level of equality as said Françoise VOUILLOT: among the huge progress during the 20th century in the education system, the development of the education of girls allowed the construction of a fairer, more humane society. The Act of 10 July 1989 has established in its first article that the school helps to promote equality between men and women (Françoise Vouillot, 1999). In the early 1980s as national education really began to realize the need to promote gender equality and the fundamental role of the school in this mission. The differences we see between the sexes in terms of exact sciences have become the subject of a number of topics. The importance for such comparisons had begun since the finding of a very high differentiation at the level of both sexes by teachers and on the low percentage of girls in some scientific options for a large level. Some comparative studies have shown that still there is a significant difference between boys and girls at the level of the exact sciences such that in another study, Oloyede (1984) indicated that boys outperform girls in a performance of the female students program. And also, according to the result of some authors because they have shown that boys have achieved significantly than girls at a time in results in chemistry and mathematics on senior secondary examinations in many countries. The Conclusion between the two hypotheses proved that there was a significant difference, the only problem that can lead girls to be obstacles in education, it's their cultural social aspects in our societies.

Like has says Madeleine Kabore Konkobo << among the sociocultural aspects impeding the schooling of girls include parental attitudes in relation to the education of a girl, the burden of domestic chores of the little girl, social conceptions of the role of women as which the female child should seek to prepare for his future wife task, mother, or should do priority; which leads to forced and early marriage. >> This factor tends to lose its value and today we are seeing a significant difference only in underdeveloped countries. What is now a very important distinctive element, with the aim that it is really in these two categories of sex, the percentage of the level of girls do not reaches those boys since 1980.As said Poglia, Edo; Molo, Cristina that: several studies have dealt with the various factors, representations and motivations that lead young student (e) s to choose their academic. These factors are multiple, ranging from personal inclinations interests, abilities, values, personality-, social representations of studies and of occupations, to the diversification of the expectations and trajectories related to male and female gender (Bratti \& Asowo, 2001; James, Baldwin \& McInnis, 1999; Vouillot 1999; Zwick \& Renn, 2000).The authors have shown that the choice of a field of study is based primarily on incentives for studies in itself and personal inclinations (Notter \& Arnold, 2003), but also that the motivations are related practicalities such as career opportunities,
income of the future profession, being able to have an independent work, etc., or interests of social order (Borzaga1999; Heine, 2002; Heublein \& Sommer, 2000; Lewin, Heublein, Scheiber \& Sommer, 1999; Lewin, Heublein \& Sommer, 1999; Prenzel, 2002; Tomasini, 1993; Zwick \& Renn, 2000). Can also exercise influence the encouragement and the values of the family (Ferrand, Imbert \& Marry, 1999), friends, teachers and specialists of the school guidance (Galley \& Droz, 1999), as well as the desire to imitate a person you admire.

## Research objectives

The purpose of this article is an investigation study between two genders, public and private schools, through the achievement of the pupils in the exact sciences: A case study of selected secondary schools in Conakry, Guinea. In particular, the present article has two objectives which are to:

Compare the performance between boys and girls in secondary schools in three subjects' exact science.

Identify the pupil's parent satisfaction in teaching at both types of schools (public and private), to compare the achievement between public and private pupils in exact sciences

## Research Questions

The study answers the following questions:

- Is there an inequality on the score of achievement between girls and boys in exact science?
- What is the main determinants of parent satisfaction in both types of schools (public and private)
- Is there an inequality on the score of achievement between public and private pupils in exact sciences?


## Hypothesis

$\mathbf{H}_{\mathbf{1}}$ : There is no a significant difference in performance in exact sciences between the boys and girls within institutions.
$\mathbf{H}_{\mathbf{2}}$ : Through the both type of schools, there is a positive relationship between the pupils' parents' satisfaction and some achievement factors of their children success
$\mathbf{H}_{3}$ : There a significant difference in performance of exact sciences between the public's pupils and private 'pupils.

## Research Method

Environment and context of the study:
This study covers the public and private institutions of education. Most of the case study reviewed is based on these two questions: equality
between boys and girls, also the performance of private school and public through the achievement their pupils.. The survey method we used is a descriptive and explanatory design method based on a sample of 1400 pupils on the Terminal promotion (TSM and TSE) in the three major high schools in the capital of Conakry, including the comparison between public schools and a private school. Student performance on standardized tests-when students follow the same annual program so the performance is controlled through the statistical technique

The structure and methodology for analysis of the work are as follows:

1 Data Collection
2 Distribution of data across both sexes
3 Data exploration
3-1 Kolmogorov Smirnov
3-2 Test Shapiro-wilk
3-3 Normal qq--plot Test
4- The general description of the data
5- The Student's t test
6. Conclusion

## Organization chart



Our method has been found to be good because it allowed us to obtain a representative sample in these big schools of 1400 of 1566 pupils of Terminal promotion SM and SE. It also helped us to know the level of pupils in the exact sciences before the real national exam, and also at the level of establishments whose description data is represented below.

| Table 1: |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Description of the data of three subjects and Public and private schools |  |  |  |  |
| Math | Gender | Mean | S.D | Skewness | Kurtosis |
|  | Boys | 10.7604 | 3.18155 | -.039 | -.704 |
|  | Girls | 9.8730 | 2.91671 | .077 | -.579 |
|  | Boys | 9.7495 | 3.07213 | .057 | -.603 |
| Chemistry | Girls | 8.8275 | 3.09636 | -.018 | -.621 |
|  | Boys | 10.0460 | 2.46187 | .009 | -.686 |
|  | Schools | Girls | 9.0941 | 2.53497 | .262 |
|  | Public | 9.4437 | 2.53497 | .254 | -.519 |
|  | Private | 10.1433 | 3.30774 | -.035 | -.060 |
|  |  |  |  | -.881 |  |

We have observed two Skewness and Kurtosis in the table for both genders in the four areas above are respectively between-2 to 2 and they are very close to zero so we deduce that our samples are normally distributed according to a normal distribution to $95 \%$

## Examples and sampling techniques

A total of 1,400 pupils consisting of 300 boys and 300 girls per subject and 250 pupils (public and private) schools were selected from all pupils of the terminal promotional SM and SE and those are the pupils who were on the list to face the single bachelor. Random sampling techniques were stratified after the compositions of their pre-test exams, session 2014. At the first step, three major high schools in the 5 municipalities of the city of Conakry including public and private have been selected randomly in the capital taking into account the number of pupils.

At the second step, three major high schools in the city retained based on the number of applicants that they should submit to the account of their establishment through both SM and SE. These 5 major high schools of the city of Conakry were: the Matam high school, Donka high school, Victor Hugo, kipe and Yimbaya whose first 3 schools were selected: each of the classes of sampled Terminal, 100 students were selected. The stratified random sampling technique, allowed for the stratification of the total number of the candidate in x kind (male or female) and public and private.

## Instrument for Data Collection

The marks obtained by pupils (boys and girls, public and private) with the objective to prepare the actual tray on the basis of their skills were made thanks to the support of the heads of institutions and validate by the researcher. It was adopted and use as an instrument to test the general way
hypotheses of the study. The instrument is composed by three substances of exact sciences, both options have the same event which they have to do when the white tray to discover the level of boys and girls through the test. It focused only on the scores to make a comparative study between the two genders categories of school. We had determined the Kolmogorov and Shapiro-Wilk for verification test and also the representation of the box plot for both comparison test to see accurately the normality of the two distributions already said through their values of Skewness and Kurtosis.

Table 2: Normality Tests

| Title of three <br> exact sciences |  | Kolmogorov-Smirnov $^{\mathrm{a}}$ |  |  | Shapiro-Wilk |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Scores of <br> genders | Statistic | df | Sig. | Statistic | df | Sig. |
| Mathematics | Boys | .039 | 300 | $.200^{*}$ | .986 | 300 | .005 |
|  | Girls | .049 | 300 | .085 | .987 | 300 | .008 |
| Physics | Boys | .039 | 300 | $.200^{*}$ | .988 | 300 | .015 |
|  | Girls | .059 | 300 | $.013^{*}$ | .987 | 300 | .010 |
| Chemistry | Boys | .051 | 300 | $.053^{*}$ | .978 | 300 | .000 |
|  | Girls | .051 | 300 | $.059^{*}$ | .984 | 300 | .002 |
| Schools | Public | .049 | 250 | $.200^{*}$ | .988 | 250 | .038 |
|  | Private | .052 | 250 | $.096^{*}$ | .980 | 250 | 0.001 |

a. Lilliefors Significance Correction
*. This is a lower bound of the true significance.
This second table shows us that these data are normally distributed with a value significance of the Shapiro-wilk who is less than 0.05 (sig \& gt; 0.05 ). For more precision with the data that are less than 2000, we used the test which is better suited on these types of data. And this has been proved by the representation of normal qq-plots. See below


1 to 8 show us the normal qq-plot of the scores of pupils
Fig1 represent the score of boys in math (math1). Fig2 the score of girls in math (math2)
Fig3 represent the score of boys in physic (phys1). Fig4 the score of girls in physic (phys2)
Fig5 represent the score of boys in chemistry (chemis1). Fig6 the score of girls in chemistry (chemis2)
Fig7 represent the score of boys in Public (public). Fig8 the score of girls in private (private2)
These methods of test of normality have us reassures on the validity of our data to compare the scores obtained by both gender and two categories schools groups from the results obtained in the table.

## Administration of the Instrument

With the help of colleague's establishments Kipe, Yimbaya and Victor Hugo and teachers at the secondary level through heads of institutions that we had to collect the data under the assistance of the researcher (support of the municipal Directorate of education of Matoto).

## Method for the analysis of data

The methodology was based on the analysis of the marks obtained by the students in the exact subjects concerning their level to facilitate research in the educational field and which were analyzed by means of counting frequency, mean, standard deviation, and especially generated hypotheses have been tested on value of 0.05 significance level using $t$-test analysis.

HO 1: There is not a significant difference between the level of men and young girls within the institution through the exact sciences especially in chemistry

Table 3: Student t test summary table for men and women in Mathematics

| Genders | N0 of <br> cases | Mean | SD | DF | Tc | Tt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boys | 300 | 10.7604 | 3.18155 | 598 | 3.561 | 1.96 |
| Girls | 300 | 9.8730 | 2.91671 |  |  |  |

We note that the sig value is less than a $0.05 \ldots$....
The result of table 3 allowed us to assert that the calculation of the $t-$ test use allowed us to reject the hypothesis null. While pulling the conclusion that there is no equality between the sexes in mathematics with the value of 3.561 t-tests is higher from 1.96 to 0.05 at the alpha level. We deduce that there is a significant difference between the two categories. Where we had to reject the null hypothesis

Table 4: t-Test of Student summary table for men and women in physics

| Genders | N0 of <br> cases | Mean | SD | DF | Tc | Tt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boys | 300 | 9.7495 | 3.07213 | 598 | 4.014 | 1.96 |
| Girls | 300 | 8.8275 | 3.09636 |  |  |  |

We note that the sig value is less than a 0.05 .
The result of our table 4 allowed us to assert that the calculation of the student's test to see if there is equality between the two sexes at the level in physics was 4.014 who were larger than 1.96 to 0.05 threshold alpha levels. We infer that there is a significant difference between the two categories. Where we rejected the hypothesis null

Table 5: Student's t test summary table for me and women in chemistry

| Genders | N0 of <br> cases | Mean | SD | DF | Tc | Tt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boys | 300 | 10.0460 | 2.46187 | 598 | 4.168 | 1.96 |
| Girls | 300 | 9.0941 | 2.53497 |  |  |  |

We note that the sig value is less than a 0.05 . This result of our table 5 allows us to state that the calculation of the student's test to see if there is equality between the two sexes at the level in chemistry was 4.168 who were larger than 1.96 to 0.05 threshold alpha levels. We infer that there is a significant difference between the two categories. Where we rejected the hypothesis null
$\mathrm{H}_{2}$ : Through the both type of schools, is there a positive relationship between the pupils' parents' satisfaction and some achievement factors of their children success?

## In private school:

Table 6 relationships between the pupil's parents and some parameters of children success

| Correlations |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Qualities of schools | Possibilities of parents | Over all satisfactions | Teachers appreciations | Levels of Pupils | Behaviors of pupils |
| Qualities of schools | Pearson Correlation | S | . $906{ }^{\text {кx }}$ | . $952^{\text {x }}$ | . $673{ }^{\text {²x }}$ | .805 ${ }^{\text {ax }}$ | .832 ${ }^{\text {Tx }}$ |
|  | Sig. (2-tailed) |  | . 000 | . 000 | . 000 | . 000 | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Possibilities of parents | Pearson Correlation | . $906{ }^{\text {к® }}$ | 1 | . $922^{\text {к® }}$ | .691** | .893 ${ }^{\text {ax }}$ | . $872^{\text {ax }}$ |
|  | Sig. (2-tailed) | . 000 |  | . 000 | . 000 | . 000 | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Over all satisfactions | Pearson Correlation | . $952^{\text {x® }}$ | . $9222^{\text {к® }}$ | 1 | . $719^{\text {xx }}$ | . $8444^{\text {x\% }}$ | . $857{ }^{\text {x }}$ |
|  | Sig. (2-tailed) | . 000 | . 000 |  | . 000 | . 000 | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Teachers appreciations | Pearson Correlation | . $673^{\text {xx }}$ | . $691{ }^{\text {x }}$ | . $719^{\text {nx }}$ | 1 | . $686{ }^{\text {2x }}$ | . $710^{\text {xx }}$ |
|  | Sig. (2-tailed) | 000 | . 000 | . 000 |  | . 000 | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Levels of Pupils | Pearson Correlation | . $805^{\text {x® }}$ | . $893{ }^{\text {x® }}$ | . $8444^{\text {x }}$ | . $686{ }^{\text {x }}$ | 1 | . $766^{\text {x }}$ |
|  | Sig. (2-tailed) | 000 | . 000 | . 000 | . 000 |  | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Behaviors of pupils | Pearson Correlation | . $832^{\text {x }}$ | . $8722^{\text {x }}$ | . $857^{\text {* }}$ | $.710^{\text {x }}$ | $.766^{\text {x }}$ | 1 |
|  | Sig. (2-tailed) | . 000 | . 000 | . 000 | . 000 | . 000 |  |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |

The parameters are positively correlated with the pupil's parents at the 0.01 level of significance.

The correlation coefficients between overall satisfactions of the parents are 0.952 qualities of schools, 0.691 of possibilities of parents, 0.719 teachers' appreciations, 0.844 levels of pupils and 0.857 of behaviors of pupils

## In public school

Table7: Table 6 relationships between the pupil's parents and some parameters of children success

| Correlations |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Qualities of schools | Possibilities of parents | Over all satisfactions | Teachers appreciations | Levels of Pupils | Behaviors of pupils |
| Qualities of schools | Pearson Correlation | 1 | $.712^{\text {xx }}$ | . $507^{\text {x }}$ | . $581{ }^{\text {n² }}$ | . $506^{\mathrm{kx}}$ | . $659^{\text {xx }}$ |
|  | Sig. (2-tailed) |  | . 000 | . 000 | . 000 | . 000 | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Possibilities of parents | Pearson Correlation | . $712^{\text {2x }}$ | 1 | . $710^{\text {\%x }}$ | . $488{ }^{\text {8x }}$ | . $793^{\text {xx }}$ | .809** |
|  | Sig. (2-tailed) | . 000 |  | . 000 | . 000 | . 000 | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Over all satisfactions | Pearson Correlation | . $507^{\text {8x }}$ | . $710^{\text {x }}$ | 1 | . $316^{\text {kr }}$ | . $601^{\text {** }}$ | . $691{ }^{\text {x }}$ |
|  | Sig. (2-tailed) | . 000 | . 000 |  | . 000 | . 000 | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Teachers appreciations | Pearson Correlation | $581{ }^{\text {x }}$ | . $488{ }^{\text {\%x }}$ | . $316^{\text {sx }}$ | 1 | . $464^{\text {xx }}$ | . $493{ }^{\text {xx }}$ |
|  | Sig. (2-tailed) | . 000 | . 000 | . 000 |  | . 000 | . 000 |
|  | N | 200 | 200 | 200 | 200 | 200 | 200 |
| Levels of Pupils | Pearson Correlation | $\begin{array}{r} .506^{\mathrm{xx}} \\ .000 \\ 200 \end{array}$ | $\begin{array}{r} .793^{\mathrm{xax}} \\ .000 \\ 200 \end{array}$ | $\begin{array}{r} .601^{\mathrm{xK}} \\ .000 \\ 200 \end{array}$ | $\begin{array}{r} .464^{\mathrm{xx}} \\ .000 \\ 200 \\ \hline \end{array}$ | 1200 | $\begin{array}{r} \hline .651^{\star \pi} \\ .000 \\ 200 \end{array}$ |
|  | Sig. (2-tailed) |  |  |  |  |  |  |
|  | N |  |  |  |  |  |  |
| Behaviors of pupils | Pearson Correlation | $\begin{array}{r} .659^{\mathrm{xx}} \\ .000 \\ 200 \\ \hline \end{array}$ | $\begin{gathered} .809^{\mathrm{xP}} \\ .000 \\ 200 \\ \hline \end{gathered}$ | $\begin{array}{r} .691^{* \pi} \\ .000 \\ 200 \\ \hline \end{array}$ | $\begin{array}{r} .493^{\prime \prime} \\ .000 \\ 200 \\ \hline \end{array}$ | $\begin{array}{r} .651^{\mathrm{xN}} \\ .000 \\ 200 \end{array}$ | 1200 |
|  | Sig. (2-tailed) |  |  |  |  |  |  |
|  | N |  |  |  |  |  |  |

**. Correlation is significant at the 0.01 level (2-tailed).

The parameters are positively correlated with the pupil's parents at the 0.01 level of significance.

The correlation coefficients between overall satisfactions of the parents are 0.507 qualities of schools, 0.710 of possibilities of parents, 0.316 teachers' appreciations, 0.601 levels of pupils and 0.691 of behaviors of pupils

Remarks: With the both of school, we observe that the pupils' parent of privates' school are more satisfy than the pupils parents of publics’ schools
$\mathbf{H}_{3}$ : Is there a significant difference between the public's pupils and private 'pupils in exact sciences?

Table 8: Student's $t$ test summary table for Public and Private Pupils

| Genders | N0 of <br> cases | Mean | SD | DF | Tc | Tt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Public | 250 | 9.4437 | 2.53497 | 498 | -2.654 | -1.96 |
| Private | 250 | 10.1433 | 3.30774 |  |  |  |

We note that the sig value is less than a 0.05 . This result of our table 8 allows us to state that the calculation of the student's test to see if there is equality between the two sexes at the level in chemistry was -2.654 who were larger than -1.96 to 0.05 threshold alpha levels. We infer that there is a significant difference between the two categories. Where we rejected the hypothesis null, because from the result obtained there a significant difference between the public's pupils and private 'pupils in exact sciences

Situation analysis (Guinean educational system)
We are in a society where the development of today's world is based on exact sciences, which this growth has become in our day a scourge that dominates World Business. The development of the science has needs the contribution of all the beings on this earth has equal share between people concerned. Inequality still exists, albeit at a low level through our investigation and observation. The Guinean educational system is inherited from the French model. It breaks down into several cycles: the preschool, primary, secondary and higher cycle, the number of pupils entering high school strongly decreased by the number of pupils in the last year of college. Indeed, the gross enrolment rate is $26 \%$, 53 girls are enrolled per 100 boys. Then the Guinean students complete their education in high school for a period of three years. There are three options: mathematics, experimental sciences and social sciences. A reform in 2008 took place with the introduction of the single baccalaureate which was decided by authorities. In Guinea, the exact sciences are for girls a very difficult sector, which can be considered as an obstacle for abandonment. The prompted institutions to encourage girls in the series accurate so that they can access the University
to promote girls in scientific circles, in particular Math, physics and chemistry in order that they can continue to move in the technical branches. Another problem nationally, the education is also confronted to the domination of number of private school precisely in the capital Conakry. Given the salary of civil servants it is difficult for most of the parents of pupils to enroll their children in private schools. We will ask the government and national and international institutions help the government to solve this problem. About the first problem, as for the boys they are more frequent in the exact series than literary. We find through the scores that boys provide much more effort than girls. Based on our research, we will to provide evidence that will cite the five basic concerns and principal problems facing the Guinean educational system

1-The absence and control of the ministry of education
2 -Improvement of living conditions and Training of teachers.
3- The contribution of pupils parents in the training of children.
4- Construction of public schools.
5- Continue to promote girls in all sectors of activities

## Conclusion

We have seen that according to our remarks this study based on the performance of both genders and two types of school (public and private)with data analysis and interpretation of our results are: The two categories of gender (boys and girls) do not have the same score in all three subjects. The yield of the two categories is not dependent on their social aspects. Also, boy and girl gender pupils had the same level of treatment for the success of having the average in all three subjects because there was a significant difference in their performance throughout the averages. In the second analysis, we observe that the pupils' parent of privates' school are more satisfy than the pupils parents of publics' schools and score achievements of the two types of school are not the same cause of a certain number of factors such as: Today the number of private schools is very high compared to public schools. An acceptable workforce in private against the public after the teachers (Which is due number of students per class). $80 \%$ of civil servants have their children in private for a good training. Teachers teach better by private than in public. There is competitiveness between private schools. Through our results obtained with our analysis, interviews and field observations

## Recommendations

Taking into account the conclusion of this study, we recommended the following:

1- Since gender does not affect the performance of the two categories of pupils through the three subjects, nowadays the teaching and learning of sciences should be freely among the students of the two categories of pupils.
2. The development of exact sciences today is a subject that should be encouraged by teachers, pupil's parents and especially the guidance counselors to place special emphasis on the training of gender categories.
3. The government must do everything to put the resources available to teachers and build some public schools for increase the level of pupils

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