



Impact of School Type on the cognitive Development of Secondary School Students in Maiduguri Metropolitan Council, Borno State, Nigeria

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ABSTRACT

This study examined the impact of school type on the cognitive development of secondary school students in Maiduguri Metropolitan Council, Borno State, Nigeria. The study sought to study the relationship between academic performances between students in the private with those of their counterparts in public schools within the study area. A total of two hundred participants, made up of ninety three males and one hundred and seven female students took part in the research. The ages of the students ranged between fourteen and twenty two years. A public school questionnaire was adopted and modified to suit the aim of the study for the purpose of data collection. Three hypotheses were formulated and tested using one-way analysis of variance. The first hypothesis which stated that students from private schools will not perform better than students from public schools showed a significant result at $f(4) = 6.15$ with $p < 0.05$. The second hypothesis which stated that the quality of education in private schools was not better than those of public schools was also rejected. This was owing to results from the analysis of variance which showed that there was a significant difference at $f(4) = 1.55$ at $p < 0.005$ while the third hypothesis which stated that school type will not significantly affect the personality of a student in either school types, was not statistically significant at $f(4) = 0.11$, $p < 0.05$. Recommendations were made in line with the findings.

Keywords: Impacts, School Type, Cognitive Development, Maiduguri, Borno State

INTRODUCTION

Personality development of a child has a profound impact on his/her academic and moral standing in life. The school as an institution has been researched in relation to performance and children's development (Devoc et al., 2003). There is a broad and growing support for quality education in schools. Each teacher, in line with this belief endeavours to impress upon the minds of the students, the principles of morality, truth, justice, patriotism and hard work. These should be true comprehension of the rights, duties and dignity of the citizenry. The value or virtue base of our society will never improve if we ignore them in the education of the young.

The subject of the role of performance in public and private schools has been a source of controversy and philosophical debate and discussions on the above-stated issue have come from different people who all

have their own view points on the matter (Martinez *et al.*, 1995; PACE, 1999; Devoc *et al.*, 2003). A private school is owned or operated by a person, firm, association, organization or corporation provided it is not owned and operated by government while a public school is one that is owned and operated by government or by a public agency. Private schools are also not subject to provide free education under the constitution but are traditionally expected to impose fees in addition to tuition (Jimenez *et al.*, 1987).

Sherman (2001) found out that even though public and private secondary schools were similar in importing character education among their students that students in private schools performed significantly better in measures of morality and achievement than those in public schools. Private school students routinely achieve at higher levels than public school students. Students' behaviour was more appreciated by parents who were more satisfied with the quality of their children education in private schools. Martinez *et al* (1995) revealed that public school students were more likely to report having experienced violent victimization and in the study, about 4.4 percent of such children were observed to have experienced one form of victimization or the other in 1995. The private school students were just 2.3 percent in same 1995. The same study showed that students in public schools were more likely to report that drugs were available in their schools than were students in private schools (Heckman, 1979).

In a group work conducted by Devoc *et al.* (2003) to ascertain indicators of school crime and safety, the result showed that in 1999-2000, 20 percent of all public schools experienced one or more serious violent crimes such as rape. Analyzing raw data from the 2000 National Assessment of Educational progress for 28,000 fourth and eighth grades representing more than 1,300 public and private schools, Mrs. Lubienksi, whose research focused on equity issues in mathematics education, was surprised by what she was saw when children of similar socio-economic status were compared and the public school children scored higher than their private counterpart. When the students were divided into four socio-economic groups, the difference between public and private school mathematics scores was 6 to 10 points for fourth graders in each group and 1 to 9 points for eighth grades. Not a large difference, says Mrs. Lubienbski but just more of "small to moderate". The crux of the study isn't so much to suggest that public schools are outpacing private schools as to call into question a common assumption but it's just that more than ever before now, it negates general assumption contrary to what was earlier thought that private schools do better than public."

Keg findings from the Parents Advancing Choice in Education PACE (1999) indicates that approximately 40 percent of private school parents reported that they were "very satisfied" with what is taught and the teaching of moral values among other issues. Pepler and Craig (1997) investigated the relationship between school size, school type as well as morality and found that private schools had higher total test scores than public schools.

Owing to the general assumption that the type of school one attends determines his/her level of performance right from kindergarten and beyond in some quarters, and counter claims in other arenas, the research work was borne to investigate impact of school type on student's cognitive development by focusing on teachers and not parents or students. In this research work, we are also interested in finding out those factors that are responsible for the poor performance of pupils in public schools and private schools and finding out whether academic performance and cognitive development are significantly correlated. These are the objects of this study.

METHODOLOGY

The design of this study was a survey method. It was used to collect information on school performance and personality development among students in both private and public primary schools in Maiduguri Metropolitan Council, Borno state, Nigeria. The participants for this study were one hundred (100) primary school teachers from both private and public schools. Fifty (50) of the participants were sampled from public primary schools and another fifty (50) were sampled from private primary schools. Their ages ranged from 25 to 63 years. Ten (10) teachers each were sampled from each school visited with five of the schools being public primary school while the others were private primary schools. The teacher's opinions were sought because they were in a better position to assess pupil's personality development

than the pupils themselves. Pupils or parental opinions weren't sought because of chances of illiteracy amongst parents or inability for pupils to properly express themselves.

The major instrument used in this study was a questionnaire. The questionnaire was designed by the researchers to measure school performance and personality development of primary school pupils. The major items of the questionnaires were adapted from the public school questionnaire. The questionnaire was divided into two (2) sub-scales. The first scale consisted of demographic information and the second consisted of items that measured school performance of children and their personalities.

The research instrument (questionnaire) used was scored using the likely scale. It was scored from 1 to 4 points, with four being the highest point. The least point on the scale which is 1 represented strongly disagreed, while highest point which is 4 represented strongly agreed. The scale is properly presented below:

1. Strongly disagree 2- Disagree 3. Agree 4- Strongly Agree, respectively.

In administering the research instrument, the researchers administered the questionnaire to participants at the various schools in their classes after obtaining permission from the school authorities. Teachers were also informed about the purpose of the research and the confidentiality of their responses was also assured in advance.

The teachers were informed that there was no right or wrong answers to the questionnaire items. The questionnaires were collected by the researcher as soon as each respondent completed his or her questionnaires.

Two statistical tools were used in the analysis of the data collected in the research; standard deviation and one way analysis of variance.

RESULTS AND DISCUSSIONS

This section presented the results obtained from the analysis of data collected. Both descriptive and inferential statistics were employed to subject the data to analysis. Table 1 below showed that 80% of the participants who responded to the questionnaires were males while the remaining 20% were females. This showed a high level of gender-bias in the respondent's composition.

Table 1: Distribution of participants by sex

Participants sex	Frequency	Percentage %
Male	80	80
Female	20	20
Total	100	100

Table 2: Distribution of pupils by age range

Participants sex	Frequency	Percentage %
14-16 years	39	39
17-19 years	25	25
20 -21 years	36	36
Total	100	100

Table 2 above showed that 39% of the total primary school pupils the teachers used as basis for their assessment in this study were between the age range of 14 and 16 years, 25% of them were between the ages of 17 and 19 years while 36% of them were within the age range of 20-21 years.

Table 3: Distribution of participants by age range

Participant's age	Frequency	Percentage %
21 - 30 years	54	54
31 – 40 years	25	25
41 - Above years	21	21
Total	100	100

Table 3 above shows that 54% of the total number of primary school teachers that participated in this study ranged between age 21 and 30, 31 to 40 years were 25% while 21% of them were between the ages of 41 and above.

Table 4: Distribution of participants by religion affiliation

Religion	Frequency	Percentage %
Christianity	97	97
Islam	3	3
Total	100	100

From the above presentation, it was clear that 97% of the primary school teachers that participated in this study were Muslims while 3% of them were Christians.

Table 5: Distribution of participants by school location

Location	Frequency	Percentage %
Town	60	60
Rural	40	40
Total	100	100

The total number of participants that were sampled from rural schools were 40% and the remaining 60% were sampled in town.

Table 5: Distribution of participants by parent's educational status.

Parental Educational status.	Frequency	Percentage %
Educated	45	45
Uneducated	55	55
Total	100	100

When the participants were asked about their parent's educational status, 45% of them reported that their parents were educated and 55% indicated that their parents were not educated. This showed high illiteracy level among parents of the respondents.

Hypothesis I: Students from private schools will perform better than students from public schools. The calculated F (6.15) is larger than the F(0.05) from the Table (2.87), this meant that the result is significant and the research hypothesis is upheld, rejecting the alternate hypothesis which stated that students from private schools will not perform better than students from public schools. Therefore, it has been found in this study that students from private schools would perform better than students from public schools in the study area.

Table 6: Quality of Education between private and public schools

Sources of variation	Sum of squares	Degree of freedom	MS	F
Quality of education	2.3	4	1.01	6.15
Error	12.2	20	3.8	
Total	14.5	24		

The research hypotheses tested the statement which stated that students from private schools would perform better than those in public schools. The findings would be interpreted by making reference to the

works of Cellaher and Clement (2000) and Kilgore (1997). In such instances, no significant differences were found between private and public school students in terms of mode of behavior, although there was a mean score difference between private and public schools students on personality development, yet the results was not statistically significant.

The study also found that both schools taught values but they were not necessarily the core moral values and they went ahead to state that by deliberately excluding these shared moral values from the curriculum that the educational system actually undermines them. Students naturally looked-up to the school to provide them with important knowledge; it is all too easy for them to assume that information not taught in school cannot be very important. Lee and Anthony (1988) and Heller (2001) also held this view.

Hypothesis 2: The quality of education in private schools will be higher than in the public schools. Table 7 below showed that $F_{cal.}$ (1.55) is less than the $F_{tab.}$ (2.87) value at 0.05% level of significance. This therefore implies that the result is not statistically significant. And the stated hypothesis which reads that the quality of education in private schools will be higher than the quality of education in public schools is rejected and the alternate hypothesis accepted.

Table 7: Quality of Education in Private and public Schools

Sources of variation	Sum of squares	Degree of freedom	MS	F
Quality of education	1.36	4	0.34	1.55
Error	4.4	20		
Total	5.40	24		

The second hypothesis which stated that the quality of education in private schools is higher than that in public schools in the study area because it was felt that those private schools provide a better education than public schools.

That is, given reasonably almost similar backgrounds, that students in private schools generally out-performed their public school counterparts on standardized mathematics or language tests or both. This holds true for students from different socio-economic groups but not really with those from almost comparable socio-economic backgrounds (Coleman *et al.*, 1982; Cellaher and Clement, 2000). Private schools do have some advantages and this has been found to persist even when the computations hold constant, the background of the higher status of the average private school students were rather higher than that of the average public school students in this study.

There are contributory factors to the cognitive achievements of students due to the resources that are present in private schools and which may not be present in the public schools. The findings in this study implied that through policy-making, government could encourage greater private sector participation in education to help enhance educational advancement. It should be stressed, however, that the relative efficiency of private schools is highly dependent on the institutional regime and structure of incentives under which they operated at that moment. Generally, such could be lacking in public schools, leaving the students at their own self-motivation status to thrive in cognitive development. In addition, government subsidies could be associated with institutional changes that should help to reduce the school's ability to choose a suitable input mix to strive for greater efficiency. And also, public schools could at least emulate some of the teaching and administrative practices of the private counterparts. The usual assumption in considering government policies toward private schools is that the quality of education they provide is not commensurate with what is being paid by the consumers and providers, and this wisely held assumption is complemented by the view that bureaucrats have information regarding the technology of education (Anderson (2002). The evidence is that private schools which are more autonomous are more responsive

to students and their parents think such would deliver education in a cost effective way. This view was also held by Cox and Emmanuel (1990).

Hypothesis 3: School type will significantly affect the personality development of a student.

The ANOVA summary table presented above contains the result on the hypothesis which stated that school type will significantly affect the personality development of a student. The table showed that the Fcal. (0.11) is smaller than the Ftab. (2.87) at the 0.05% level of significance. This therefore means that the result is not statistically significant, hence the stated hypothesis that school type will significantly affect the personality development of a student is rejected and the alternate hypothesis accepted.

Table 8: Impact of School Type on personality Development

Sources of variation	Sum of squares	Degree of freedom	MS	F
Personal development	0.24	4	0.04	0.11
Error	10.8	20	0.54	
Total	11.04	14		

The findings above were consistent with prior studies that documented a heightened effect of family and school type instilling morals into students thus school type not having significant inputs in the personality development of students (Franke, 2000, Anderson 2002). This explains why it is that students, in public schools from poor background are more likely to engage in immoral behaviour, to report having been in serious physical fight, to have seriously injured someone and to have shot or stabbed someone in the previous year (Franke, 2000; Duncan *et al.*, 2002). Besides the school, parents also have the responsibility to teach values. Indeed, in such a morally apathetic environment, parents are in better position to instill strongly grounded values to their children as this can help in shaping their lives. These children may turn out to be important resources both as role models to their peers and in values education. Therefore, school type should not be yardsticks for judging performance but a combination of factors as family values, parental guidance and input and self discovery and reorientation.

CONCLUSION

From the above study, it was clearly obvious that something was wrong with the public education system. In line with the present findings, it is concluded that private schools are better than public schools in terms of performance and quality. But, with respect to quality of education and personality development, there seemed to be no significant difference between private and public schools. To this end, our understanding of school type on the personality development of children is clearer. The priority now is to explore how such understanding can be channeled into improving the quality of our public schools. Education of the young is too important as children are the future for the nation and for them to be without proper education would be very terrible.

The findings of the present study have some implications for understanding and promoting the standard of education in schools. The assumption that students in private schools outperform those in public schools can be questionable in cases where you have unique students in public schools that are also outstanding in their performance. Another implication is that a person’s socio-economic background does not necessarily determine his/her level of performance in school. Finally, governments, administrators and policy-makers must all recognize the importance of quality education and try to make it obtainable in all schools and also at a cost-effective way so that education will be possible for even those that are in disadvantaged class.

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