

THE ROLE OF SCHOOL FACILITIES IN ACADEMIC PERFORMANCE OF STUDENTS: EVIDENCES FROM DISTRICT MALAKAND, PAKISTAN

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ABSTRACT

Education is the process of socialization that enhances the ability of the individuals to help them survive peacefully and productively in the society. In Pakistan, both public and private sector schools are working hard in the provision of quality education. Private schools strive to perform well as compared to the public sector schools and started to claim that they have better school facilities and academic performances of their students are also better. Their claims of providing quality education has become a debatable topic for educationalists and social scientists across the country. Keeping in view the same context, the current study was conducted in Tehsil Batkhela of District Malakand in Khyber Pakhtunkhwa (KP). The aim of this research was to compare the facilities in public and private schools with reference to the provision of quality education. Through multi-stage cluster sampling two public and two private schools were randomly selected at secondary levels. From each school, 25 students were selected in both 9th and 10th class. Three dimensional data were collected; (a) form the administration of the schools about available facilities (b) from selected samples regarding their family background and (c) surprise tests were also conducted to measure the educational performances of sampled students. Both descriptive and inferential statistics were applied. The results showed that facilities of the public schools were the same or somewhat better but the educational performances of private schools were better. Further, it was found that schools' facilities were not having a major role in better educational performances of students rather the role of family background and engagement in tuition after school hours were found as responsible factors.

Keywords: Education, public and private schools, facilities in school, quality education, academic performance.

INTRODUCTION

Education is light in the dark and the way through which different countries try to plinth on the ladders of progress. Education plays a pivotal role in the ups and downs of the nations in the 21st century (Awan, 2014). Across the world we find three forms of education including (a) formal (b) informal and (c) non-formal (Dib, 1987). Apart from others, the formal education is provided under the duo of public and private institutions having hierarchal structure and chronological grading system (OECD, 2012). The provision of education through private institutions is not a problem for the developed nations, because they sponsor and take check and balance over them, while in developing countries they are running independently and working apart from government interventions (OECD, 2012). When Pakistan came into being, it was difficult for the government to provide primary education for all thus, non-governmental institutions took part in its provision. Within five to six decades, the number of private educational institutions elevated not only at primary levels but at secondary levels too. The Pakistan education statistics report of the years 2015-2016 and 2016-2017, and National Bureau of Statistics 2018 and 2019 showed a massive increase in private educational institutions in comparison to public.

Nowadays, the increase in the number of private educational institutions is debatable topic for most of the educationalist and social scientists. There are more private schools now, and they are devising mechanisms for improving students and teacher's academic skills and providing them with the better educational environment (Awan & Saeed, 2014). The claims of private schools with respect to availability of the facilities therein and the provision of quality education than public is the intensive point of interest, because this study was conducted in Tehsil Batkhela of District Malakand, KP where it is generally observed that public educational institutions are having better facilities than private at secondary school levels.

Objectives

1. To compare the facilities in both public and private secondary schools.
2. To investigate the conceptual clarity of secondary level students in their course work in both sector institutions.
3. To explore what type of facilities in schools are responsible for better performance of students in their studies.
4. To examine the role of family background on the academic performance of students.

REVIEW OF LITERATURE

Quality education is a process, where well-qualified teachers use child-centric teaching approaches in a good environment of classrooms and do skillful assessments to facilitate learning for the purpose to reduce disparities (UNICEF, 2000). Without quality education the progress and prosperity of any country are difficult to achieve, and a nation can only touch the level of development if they have qualified citizens with quality education (Iqbal, 2012). Various researches have been conducted to explore the relationship between facilities in school with quality education. Facilities in school are the amalgamation of different programs, policies, curricular and co-curricular activities that motivate students for better performance in their studies (Imran, 2010).

Schneider (2002) analyzed the role of school facilities in students' academic performance. He discussed that six facilities have massive effects on the educational outcomes of students, such are inside air quality, ventilation, thermal comfort, building age and quality, school size and quality size. The availability of these facilities not only upgrade students' academic performance but could have positive impacts on the teacher recruitments, commitments, retentions and efforts.

O'Neill and Oates (2001) and Earthman (2002) have discussed in their studies about the condition, size and shape of classrooms and school building having greater effects on students learning. In contrast, Lawrence (2005) argued that building condition and stability has no relationship with the academic scores of the students. In response to previous others, Woolner, *et al.* (2007: 47-70) conducted a study and found different factors of the physical environment that have both positive and negative effects on one another as well as on the academic performance of students.

The classroom and building size have major roles in student's learning, but the availability of latest technology, like, computer and equipment in the laboratory also have profound effects on their education quality (Brooks, 2011). In connection with this, Byers, Imms, and Hartnell-Young (2014) comparatively analyzed traditional learning with new generation learning spaces' (NGLS) and found that due to the use of technology in modern education, students' educational outcomes are much better. Students can only utilize the equipment positively and can upgrade their skills, if the class temperature is favorable for them (Uline, & Tschannan-Moran, 2008; Park, 2016; Cho, 2017).

Along with all available facilities, the most important role is performed by the teachers in imparting students with skills. Andrabi, Das and Khwaja (2002) stated that teachers in private schools are well qualified and can move their students toward the better way. In response to this, Imran (2010) argued that teachers in private schools are not well-qualified then public ones. But their interaction and behavior with students as compared to public school teachers is far better. Further, the administration of private schools does concurrent assessments of their teachers' performance and provide them with full teaching materials,

due to which the performance of their students is the better as compared to public schools (Iqbal, 2012; Ahsan, Sharma, & Deppeler, 2012).

The most important role in quality education for students is of their parents, Dahl (2002) found that parent's good presentation and communication skills play a pivotal role in well grooming of their children and avoid them from all type of risks. In similar way, Barnett *et al.* (2012) analyzed that parent's education and their help with children not only brings literacy development but also strengthens their children's language skills.

METHODOLOGY

The current study was conducted in Tehsil Batkhela of District Malakand, KP. This area is very vast and comprising of both urban and rural territories with total number of 28 public sector and 42 private sector secondary schools for both genders. Through the multistage cluster sampling two public sector (W, X) and two private sector of the same genders (Y, Z) were randomly selected as unit of data collection. Both sector schools were English medium as well as popular in the area and their curriculum for studies was also the same at secondary level (9th and 10th classes) thus, 25 samples were randomly selected from each class in in all schools to represent their educational sectors (Kalton, 1983; Kish, 1965; Sudman, 1976; Williams, 1978).

Three dimensional quantitative data were collected for comprehensive understanding: (a) school facilities (b) quality education and (c) student's educational performances. Firstly, through a semi-structured interview schedule, data were collected from the administration of both public and private schools (four in total) regarding available facilities therein. Secondly, the data was collected from the selected samples of 200 students regarding their family background through another interview schedule. Thirdly, surprise tests were prepared from the respective schools' curriculum of 9th and 10th classes and were executed from 200 students to understanding the academic performances of the students. These tests were focused on English, Mathematic, Physics, Chemistry, and Biology subjects, for the purpose to know the reading literacy, mathematical literacy and scientific literacy of students (Schleicher, 1999). All the data was collected through direct interview schedules in four consecutive days of a week. Following variables of the current study were set and examined through the descriptive and inferential statistics:

Table 1: *Study variable*

Independent Variable	Dependent Variable
Facilities in school and family background of respondents	Quality education
Indicators	Indicators
Teacher training, multimedia facility, laboratory	Reading literacy
classroom average size, electricity, air conditioning facility,	Mathematical Literacy
number of teachers,	Scientific literacy
availability of playground,	
motivational rewards, drinking water,	
washroom facility, educational scholarships, parent's	
monthly incomes,	
qualification of parents, professions, student's tuition after	
school hours	

RESULTS AND DISCUSSION

Table 2 comparatively indicates the demographic information of all the sampled public and private schools. Variation can be seen in different indicators in both sector institutions. Some of the indicators show a better picture of public schools like area, building age, and year of establishment, classroom size and teacher average salary, while student's strength per-school and per-class, and number of students' per-teacher were better in private schools. Further, the rest of facilities like teachers training, multimedia facility, laboratory, electricity, air conditioning facility, availability of the playground motivational rewards, drinking water, washroom facility and educational scholarships were available in both sector institutions and didn't showed

Table 2. Demographic Information of Schools

Sector	School Name	Area (sq. feet)	Building Age (yr)	Est. Year	Class Room	Class Ave. Size (sq. feet)	Students Strength Per-School	Students Per-class	No. of Teachers Per-School	No. of Stud. Per-Tech.	Teacher Ave. Size
Public	W	15000	10	1988s	12	288	603	50	31	20	53500
	X	70000	10	1913s	23	288	1544	67	52	29	80000
Private	Y	8000	2	1992s	7	210	215	31	14	15	15000
	Z	1350	35	1984s	39	220	688	18	42	16	25000

any variation.

Table 3 shows that in public schools the majority of the respondents' parents were engaged in less-economical professions, like 53% labor and 6% driving, while few were engaged in good professions, like, 33% running shops, 5% teaching and 6% in office work. Further, Majority 99% of their mothers were housewives and only 1% was teacher.

Table 3. Parent's Occupation

Sector	School & Parents	f	Professions								
			Labor	Shopkeeper	Teaching	Banking	Driving	Office Work	Deceased	Doctor	House Wife
Pub.	W & Father	50	53%	33%	5%	0%	6%	3%	0%	0%	0%
	X Mother	50	0%	0%	1%	0%	0%	0%	0%	0%	99%
Pvt.	Y Father	50	6%	44%	18%	2%	7%	20%	2%	1%	0%
	& Z Mother	50	0%	0%	10%	0%	0%	0%	0%	1%	89%

On the other side, parents of private school respondents were engaged in more economically better professions, like, 44% were shopkeepers, 20 were doing an office work, 18% were teachers, 2% were doing bank jobs and only 1% was a doctor. We can also see that about 10% of private school respondents' mothers were teacher and 1 was doctor that shows their good family background. Number of studies have identified that parents' educational levels and professions were equally important for the selection of private schools (Yaacob, Osman, & Bachok, 2014:244). Generally, the parents who had better incomes usually chose private schools as they have achieved their better careers and standards of living through the same way that's why they were more inclined towards quality education for their children as well (Suppramaniam, Kularajasingam and Sharmin, 2019:325).

Table 4 depicts information about the qualification of respondents' parents. It can be noted that majority of the parents of public school's respondents were illiterate (about 50% fathers, 71% mothers) while the education of few was up to a matriculation.

Table 4. Parent's Qualification

Sector	School & Parents		F	Illiterate	Primary	Qualification				16 & above
						Middle	Matric	FA/ FSc	BA/BS C	
Public	W & X	Father	50	48%	12%	10%	20%	2%	4%	4%
		Mother	50	71%	17%	5%	4%	0%	2%	1%
Private	Y & Z	Father	50	18%	6%	1%	19%	25%	9%	22%
		Mother	50	49%	4%	12%	16%	5%	5%	9%

The under graduate and graduate percentages of fathers and mothers' qualification were 4%, 4% and 2%, 1% respectively. In contrary, the qualification of private school respondents' parents was much better and majority of them were either under F.A/FSc or 16 or above. Many studies have found the positive correlation between the qualification of parents and the selection of private schools for their children. Suppramaniam, Kularajasingam and Sharmin (2019:325) mentioned about the role of parents' qualification in the selection of private schools. They said that the more educated parents normally selected private schools of their offspring since they are more concerned about the quality of education.

Table 5. Family's Monthly Income of Respondent's Families

Sector	School	Frequency	Monthly Income						
			10000-20000	21000-40000	41000-50000	51000-60000	61000-70000	71000-80000	81000-90000
Public	W & X	100	77%	20%	0	3%	0	0	0
Private	Y & Z	100	12%	17%	13%	15%	5%	5%	17%

Table 5 depicts the monthly incomes of respondents' parents in both sectors (public and private) institutions. It was noted that monthly incomes of the private school respondents were far better than the public sectors. That could be the major reasons as only those parents whose incomes were better they were sending their children to private schools because they were in a better position to afford the schooling expenses. Many studies have concluded that there is a greater role of parents' incomes in the selection of private schools for their children.

Langouët and Léger (2000), Dronkers and Robert (2008) mentioned that the students of private schools come from the better educated and from families with higher incomes. They send their children to such schools because they wanted them to perform well in academic careers and in the case of their career paths. So, we can conclude that there is a greater role of the selection of schools in terms of academic performance and having successful careers for the children.

Table 6. Tuition for Studies After School Hours by the Respondents

Sector	School Name	Class	Frequency	Yes	No
Public	W& X	9 th and 10 th	100	33%	67%
Private	Y& Z	9 th and 10 th	100	60%	40%

Table 6 indicates the interests of respondents in their studies after school hours. It was found that private school's respondents were showing greater interests as 60% respondents were engaged in tuition while in public school they were having lesser interests as only 33% were engaged in tuition after school. Suleman and Hussain (2014:30) stated about there is an increased trend of private or home tuition in Pakistan. Most of the parents opt for the private tuition as they are more concerned about the academic performances of their children. There are some tough subjects like mathematics and English which need extra efforts and the children don't find sufficient time to completely comprehend their course in the schools that's why the private tuition is of a greater help for them in achieving better academic goals.

Table 7. Educational Performance of the Respondents in Different Subjects

Sector	Subject wise obtained Mean Marks							
	School & class	f	Total Marks	English	Math	Physics	Chemistry	Biology
Public	W 9 th & X	50	100	27.86%	12.88%	27.04%	14.24%	10.24%
	10 th	50	100	48.32%	38.72%	21.6%	20.80%	37.16%
Private	Y 9 th & Z	50	100	46.48%	43.36%	50.96%	44.96%	38.12%
	10 th	50	100	51.36%	47.2%	42.5%	37.04%	53.6%

Table 7 specifies the subject wise mean scores of all respondents of 9th and 10th class in both sector (public and private) institutions. Both in 9th and 10th class, the average marks of private school respondents were better in all subjects in comparison to the public-sector schools. Ashley *et al.*, (2014:1) have rightly pointed out that there are numbers of reasons which lead to the better performance of students studying in the private schools in comparison to the public sector ones. They added that the teaching mechanisms are better, and they provide a conducive environment, use best available technologies, and they hire quality teaching staff. That all parameters lead to the better educational performances of the children since they study in a very competitive environment.

Inferential Statistics: Regression Analysis

Table 8.1. Public Schools: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.243 ^a	.059	.049	3.54764

a. Predictors: (Constant), Respondent's Family Background

b. Dependent variable: Student's Quality Education

A linear regression was applied for the prediction of students' quality education on the basis of respondent's family background. The R Square value 5.9% indicates little interference of the family background in quality education. The reasons behind these variations were, majority of the respondents belong to a poor family background and their parents' professions and qualifications were also weak. Due

their poor economic conditions they were unable to attend tuition classes for their coursework after school hours. Suleman and Hussain (2014:30) mentioned about the role of parents' interests and supervision for the academic performance of their children. In some cases, the parents who have better incomes invest more money for their children and arrange private tuition and extra classes to improve their performances but it becomes very challenging for those parents whose incomes are not good and their spending on education are not competitive with the richer parents.

Table 8.2. ANOVA Test

		ANOVA ^a				
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	77.160	1	77.160	6.131	.015 ^b
	Residual	1233.400	98	12.586		
	Total	1310.560	99			

a. Dependent Variable: Student's Quality Education

b. Predictors: (Constant), Respondent's Family Background

The analysis of variance (ANOVA) sheds light that sig. value .015 is greater than .05 it means students' quality education and family background are not associated.

Table 8.3. Coefficients Test

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	3.180	1.379		2.305	.023
	Respondent's Family Background	1.231	.497	.243	2.476	.015

a. Dependent Variable: Student's Quality Education

The regression equation shows that $Y = A + BX$, where Y is dependent variable (Student's Quality Education) X is an independent variable (Respondent's Family Background). The value 3.180 denotes A in the equation as constant variable and 1.231 is the value of the dependent variable and denotes B in the equation. In the light of an above table, regression equation is $Y = 3.180 + 1.231X$. In this equation value of X and Y does not change.

Table 9.1. Private Schools: Model Summary

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.222 ^a	.649	.040	3.91206	

a. Predictors: (Constant), Respondent's Family Background

b. (Constant), Respondent's Family Background

A linear regression was applied for the prediction of students' quality education on the basis of respondent's family background in private schools. The R Square value 64.9% indicates higher influence of the family background in quality education. As it was found, that majority of the parents of the private school respondents were qualified and their professions were also very good. They were economically sound and were able to send their children for tuition, due to which these children were far better in educational performances. Suppramaniam, Kularajasingam and Sharmin (2019:325) identified that the role of parents' educational levels matters a lot in the selection of private schools and academic performances of their children. Parents from the well-off families spend more resources for the education of their children which ultimately help them to excel in their academic careers. On the other side, Langouët and Léger (2000), Dronkers and Robert (2008) opined that majority of the students attending private schools come

from families with better incomes and they remained more concerned about the academic careers of their children. They send their children to private schools because they wanted them to perform well in their academic and profession paths. So, we can conclude that there is a greater role of the selection of schools, such as private schools, in terms of academic performances and pursuing successful careers.

Table 9.2. ANOVA Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.066	1	5.066	5.036	.001 ^b
	Residual	97.590	97	1.006		
	Total	102.657	98			

a. Dependent Variable: Student's Quality Education

b. Predictors: (Constant) Respondent's Family Background

The analysis of variance (ANOVA) was performed which shows that the sig. value .001 is less than .05 it means students' quality education and family background are strongly associated. As mentioned above the role of parents' education and the family incomes are very crucial for schooling careers of their children. Most of the parents having better economic backgrounds and with good levels of education chose private schools for their children because they want them to perform well and excel in their career paths.

Table 9.3. Coefficient Test

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	1.208	.311		10.008
	Respondent's Family Background	.057	.025	.222	2.244

a. Dependent Variable: Student's Quality Education

Coefficient test was applied to understand the relationship between two selected variables. In the regression equation, $Y=A+BX$ where Y is dependent variable (student's quality education) X is an independent variable (respondent's family background). The value 1.208 denotes A in the equation as constant variable and 0.057 is the value of dependent variable and denotes B in the equation. In the light of above table, regression equation is $Y= 1.208 +.057X$. In this equation value of X and Y changes accordingly.

CONCLUSION

Education is one of the important tools in this modernized world and every country tries its best to improve the literacy ratios of their citizens. After independence, the Pakistani government also permitted to the private organizations to work hard and upgrade the literacy levels of the masses. Thus, private schools started increasing and with the passage of time they bypassed the public-sector schools in numbers. Further, they also started claiming of having better facilities and good quality education then public-sector schools. The main purpose of this article was to compare the respondents' family background, available facilities in schools with quality education and students' performance in both sectors' educational institutions in the research area. The results showed that basic facilities of both sectors schools like building size, year of establishment, classrooms size, number of classrooms and teachers, and their average monthly salary were somehow better in public-sector schools. While other facilities like teacher training, multimedia facility, laboratory, electricity, air conditioning facility, availability of the playground, motivational rewards, drinking water, washroom facility, and educational scholarships were same in all schools, but the quality of education and students' academic performance were better in private institutions.

The results of this study further explains that better educational performance of the students in private schools were not based on the available facilities therein but the responsible factors were students' family background and tuition activities after school timings. Through comparative analysis it was found that parents' professions, educational levels, and monthly incomes of private schools' students were better than others. Most importantly, the results showed, those children who were engaged in their studied after school time in their home or tuition centers were better in education. Thus, majority students of the private schools were engaged in it which was responsible for their better educational results. In last, the researchers concluded that the claims of private schools regarding better facilities and their role in better quality education is not true and their better quality education is depending on students' family background and engagement in tuition for studies after school timing.

REFERENCES

- Ahsan, M. T., Sharma, U., & Deppeler, J. M. (2012). Exploring pre-service teachers' perceived teaching-efficacy, attitudes and concerns about inclusive education in Bangladesh. *International Journal of whole schooling*, 8(2), 1-20.
- Andrabi, T., Das, J., & Khwaja, A. (2002). *The rise of private schooling in Pakistan: Catering to the urban elite or educating the rural poor?* World Bank and Harvard University.
- Ashley, D. L., McLoughlin, C., Aslam, M., Engel, J., Wales, J., Rawal, S., Batley, R., Kingdon, G., Nicolai, S., Rose, P. (2014). *The role and impact of private schools in developing countries: a rigorous review of the evidence*. Final report. Education Rigorous Literature Review. Department for International Development.
- Awan, A. (2014). Brazil's innovative anti-poverty & inequality model. *American Journal of Trade and Policy*, 1(3), 56-61.
- Awan, A. G., & Saeed, K. (2014). Intellectual capital and research performance of universities in southern Punjab-Pakistan. *European Journal of Business and Innovation Research*, 2(6), 21-39.
- Barnett, W. S., Carolan, M. E., Squires, J. H., & Brown, K. C. (2014). The state of preschool 2013. First look. NCES 2014-078. National Center for Education Statistics.
- Brooks, D. C. (2011). Space matters: The impact of formal learning environments on student learning. *British Journal of Educational Technology*, 42(5), 719-726.
- Byers, T., Imms, W., & Hartnell-Young, E. (2014). Making the case for space: The effect of learning spaces on teaching and learning. *Curriculum and Teaching*, 29(1), 5-19.
- Cho, H. (2017). The effects of summer heat on academic achievement: A cohort analysis. *Journal of Environmental Economics and Management*, 83, 185-196.
- Dahl, G. B. (2002). Mobility and the return to education: Testing a Roy model with multiple markets. *Econometrica*, 70(6), 2367-2420.
- Dib, C. Z. (1988). Formal, non-formal and informal education: concepts/applicability. In *AIP conference proceedings*, 173(1), 300-315. American Institute of Physics.
- Dronkers, J. & Robert, P. (2008). Differences in scholastic achievement of public, private government-dependent and private independent schools. A cross-national analysis. *Educational Policy*, 22(4): 541-577.
- Earthman, G. I. (2002). *School facility conditions and student academic achievement*. Los Angeles, CA: UCLA's Institute for Democracy, Education, and Access (IDEA).
- Imran, M. (2010). Comparative aspects of management observed by heads of public and private schools. *Contemporary Issues in Education Research (CIER)*, 3(3), 63-72.
- Iqbal, M. (2012). Public versus private secondary schools: A qualitative comparison. *Journal of Research and Reflections in Education*, 6(1), 40-49.
- Kalton, Graham. (1983). *Introduction to survey sampling*. Beverly Hills, CA: Sage.
- Kish, L. (1965). *Survey sampling*. New York, NY: Wiley.
- Langouët, G. & Léger, A. (2000). Public and private schooling in France: an investigation into family choice. *Journal of Education Policy* 15(1): 41-49.

- Lawrence, R. L. (2005). *Artistic ways of knowing: Expanded opportunities for teaching and learning. New directions for adult and continuing education*. San Francisco, CA: Jossey-Bass
- Scheaffer, R. L., Mendenhall, W., Ott, R. L., & Gerow, K. G. (1971). *Elementary survey sampling*. Belmont, CA: Duxbury Press.
- OECD (2012), *Public and private schools: how management and funding relate to their socio-economic profile*. Paris: OECD Publishing. <http://dx.doi.org/10.1787/9789264175006-en>
- O'Neill, D. J., & Oates, A. D. (2001). The impact of school facilities on student achievement, behavior, attendance, and teacher turnover rate in Central Texas middle schools. *Educational Facility Planner*, 36(3), 14-22.
- Park, J. (2016). *Temperature, test scores, and educational attainment*. Unpublished working paper.
- Schleicher, A. (1999). *Measuring student knowledge and skills: A new framework for assessment*. Organisation for Economic Co-Operation and Development, Paris, France.
- Schneider, M. (2002). Do school facilities affect academic outcomes? Washington, DC: National Clearinghouse for Educational Facilities. <https://files.eric.ed.gov/fulltext/ED470979.pdf>
- Sudman, S. (1976). *Applied sampling*. New York, NY: Academic Press.
- Suleman, Q., & Hussain, I. (2014). Effects of private tuition on the academic achievement of secondary school students in subject of mathematics in Kohat division, Pakistan. *Journal of Education and Learning*, 8(1), 29-40.
- Suppramaniam, S., Kularajasingam, J., & Sharmin, N. (2019). Factors influencing parents' decision in selecting private schools in Chittagong city, Bangladesh. *International Journal of Recent Technology and Engineering (IJRTE)*, 7(5), 318-330.
- Uline, C., & Tschannen-Moran, M. (2008). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of Educational Administration*, 46(1), 55-73.
- UNICEF. (2000). *Defining Quality in Education*. New York, NY: United Nations Children's Fund.
- Williams, Bill. (1978). *A sampler on sampling*. New York, NY: Wiley.
- Woolner, P., Hall, E., Higgins, S., McCaughey, C., & Wall, K. (2007). A sound foundation? What we know about the impact of environments on learning and the implications for building schools for the future. *Oxford review of education*, 33(1), 47-70.
- Yaacob, N. A., Osman, M. M. & Bachok, S. (2014). Factors influencing parents' decision in choosing private schools. *Procedia - Social and Behavioral Sciences*, 153, 242–253.