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Impact of Preschool Attendance on Grade-I students' Academic Achievement at Public and Private Sectors in District Lahore

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ABSTRACT

The current quantitative study examined the effects of preschool attendance on academic achievement of grade one students at public and private schools in Lahore. It gives an overview that schooling has direct influence on students' educational achievement and beneficial in building basic skills that enhance intellectual abilities for the individual to excel in his/her practical life. Early childhood education has benefits for the child's development at early age and for whole life. It provides a basis for the formation of academic development. The data were collected from 45 schools (23 public and 22 private sectors) where the sample comprised on 502 Grade I students including 251 (168 P & 83 non-p) from public and 251(210 p & 41 non-p) from private schools in the district Lahore. For data collection purpose, a self-developed achievement test, which items based on three core subjects English, mathematics and science, was conducted from 502 students. Descriptive statistics was applied to explain the frequency of the data and inferential statistics comprised Independent sample t-test, ANOVA and Post hoc was applied to find the differences between the students who had preschool education and those who had not. The findings of the

study indicated that students with preschool experience significantly performed better in academic tests in all three subjects English, mathematics & science, verified by the study. This study concluded by observing that preschool attendance prepares students with pre-requisite knowledge and skills which make their learning durable.

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Introduction

A child ultimately learns and copes with new understandings and challenges with the beginning of life. Learning starts by using five senses to know about the new happenings around the world, and this ability makes possible for him to meet and imitate others with the passage of time. The variations in human behaviors compel him to learn further. It is the curiosity that is natural in human beings to provoke them to learn more and more. Therefore, education is an essential part of a child's life span. Education is a well-managed process instruction and training planned to impart knowledge and getting skills, potential and abilities for nations' building. It not only makes a person influential but also prepares him for the progress of his society and nation. It consists of all round development of an individual like intellectual, social and ethical (Osakwe, 2006).

Early childhood education is related to school environment in formal settings, where children begin their educational life in a proper way. It is associated with all-round development of children including intellectual, academic, linguistic and social development. It is the fundamental to build groundwork in child's educational success. Children learn many habits and form new patterns that cannot be easily changed in their later life. Early education formally starts at age 3 with entry into kindergarten or nursery classes in schools. Previous studies are evidenced that early childhood education has a strong influence in the life of children (Adams, 2009).Early childhood is the essential period of one's life. The importance of this age has been identified by various educationist and specialists of different disciplines including economics, biology, behavioral sciences and education. Young (2002) suggested that intervention can also change the life course during early childhood. Children acquire the body of knowledge and basic skills ardently in the early childhood period; therefore this education has vital importance (Fischer, Denial, Immordino-Yang, Stem, Battro, & Koizumi, 2007).

The early ages (between three to five plus years) are the crucial years of a child mental development. The early education provides such abilities to the child that enables him to explore the world. Preschool education has substantial element in the academic life of a child. Preschool

education ripens character building and creates long lasting effects on students' academic achievement (Feeney, Christensen & Moravick, 1987). Preschool education is defined as taking place in creations usually attended by the child outside his/ her home in order to take part in educational activities before beginning a school. The preschool programs are planned to uphold academic abilities and long-term effects on indicators related to student's achievements. Children who experienced preschool inclined to enter school with better literacy, language and mathematics skills tended to gain benefit across the years over those children who did not attend preschool. The academic and literacy achievements are consistently and entirely related to preschool attendance. Pre-school education, either through school or via early entranced to school, has been evidenced to effective cognitive improvements from age seven to age sixteen and adulthood. The long-lasting effects of pre-schooling are quite evident in higher qualifications and employment level at age thirty three years (Goodman & Sianesi, 2005).

Preschool education brings up the child with some basic academic skills that overcome the privations to improve and results in failure. The school conducts such activities and experiences in a multiple settings that stimulate the development of children from age three to five plus during preschool education. These activities and experiences are planned to expand children's academic abilities in one or more dominions including cognition, verbal communication and mathematics, social and physical development (Knight & Hughes, 1995). The first five or six years of child's life are highly significant. What a child feels and learns especially about himself will be fundamental to the rest of his life. The child develops relationship with the people around him. Education which is given to the age of around three to five years old children in group settings is called preschool education. It is the first step in child's educational life (Russell & Tran, 2006).

In order to realize the importance of preschool education it is necessary to know the vital part of attendance in any institution. Attendance means keeping record of children's existence in school and for this purpose attendance register are prepared to maintain the student's record of receiving instructions from teachers on daily basis. Teachers or supervisors are given this responsibility to check and maintain the daily record of student's presence in school. These records are used to monitor, control and supervise the students. Preschool attendance is important for student's daily commitment with class activities (Oghuvbu, 2010).

Russell (2006) maintained that the strong relationship exists between preschool attendance and children's academic, social and emotional, and mental development. The students who attended preschool are more likely to be better in having foundational skills in language, math and science, and they show adequate social behavior regarding school environment. Preschool develops the skills and traits in children that results

in higher intelligence. All the activities and experiences are offered to promote sound development in children between three to seven ages (Marcinko, 2004). Preschool is designed to investigate these skills and activities and also improve their development in the areas like language, reading, math, social-emotional development and physical development (Lowa School Boards Foundation, 2007).They brought up with mental, physical, emotional, and social development. In the opinion of many experts, it was strongly evinced that preschool education not only promoted social and academic development of children but also prepared them for later educational requirement (Chang, Allen, & Skaggs, 2009).

Taiwo and Tyolo (2002) have conducted the research "the effect of pre-school education on academic performance in primary school: A case study of grade one pupils in Botswana" which findings were most relevant with the current study. That research was conducted on 120 grade one students by using purposive sampling techniques for the selection of school. Each student was individually interviewed and was tested on the basis of English, mathematics and science subjects. Their findings indicated that students with preschool education had out-standing performance in academic results in all three subjects' areas as compare to the students with non-preschool education. These findings strongly support the present study.
Adams (2008) also maintained that the impact of Preschool attendance on academic outcomes and social and emotional competencies is long-lasting. This study was an investigation using longitudinal data at first, third, and fifth grade levels of the schools in order to check the differences in academic outcomes and socio-emotional competencies between the students who had experienced and students who had not experience of preschool. Their findings did not indicate any significant difference between the three grade levels. But their findings supported this study for further proceedings.

Academic Achievement

Academic achievement, the degree to which a student profits from a skill or knowledge has been transferred to him. It is measured by examination, tests and continuous assessments. It is known as a key of betterment of child's future in this economical world. Being a major goal of educational process, academic achievement is expected to achieve by every person related to all cultures and disciplines. This is a fundamental tool through which individuals not only recognize their talents but also explore the abilities and competencies in themselves needed for career ambitions (Nuthanap, 2007).

Factors affecting academic achievement

Various factors influence the academic achievement of the children. It has been investigated that the factors like age of the child, family size, parent's education, parent's occupation, and even gender had influenced on

the academic achievement of every child. The following factors are included like; (a) study habits, (b) self-concept, (c) socioeconomic status, (d) parent's education, and (e) gender that allow students to work individually. It may also be described as the accepted manner a pupil plans his readings in private, after classroom learning in order to gain mastery of the subject. In simple, good study habits are golden belongings to learners because these habits guide students to gain mastery in areas of specialization and in result excellent performance would be attempt while opposite create limitations to learning and achievement leading to failure. In fact, the term study-habits is defined as the student's style of study whether systematic, well or disorganized. It is quite evident, according to the definition, that good study-habit produces positive academic performance while disorganized study habit leads to academic failure. And that is why study habit is its (academic achievement) important factor (Mccabe, Fairchild, Grauerholz, Pescososolido, & Tope, 2011).

A child grows up with recognition of not only about himself but also about the world around him. He develops his own concepts regarding himself and this world. Nadalmani (2001) continued that a child is always in search of such questions as who m I? How did I come in the world? What is the purpose of my existence? Jersild (1954) also added that self-concept as a composition of thoughts and feelings used to develop a person's awareness towards his existence in the world. Socio-economic status includes housing condition, availability of reading materials and opportunities for academic development. Family factors, such as unsatisfactory housing condition may have severe effect on educational achievement of a child. Large family system, insufficient facilities, due to worst economic condition could destroy the interest and attention of the learner, which may affect the whole process. Children with satisfactory facilities, better economic conditions will be more attentive and education would be welcome addition comparatively with those who have insufficient facilities and lacking of essential qualities in their homes. The socio-economic status has robust effects on academic achievement. The higher the socio-economic status of the children's family, the higher academic achievement will be comprehended. Parent's education had strongly influenced the academic achievement of children. The children whom parent were graduated exhibited better performance in academics than those students whom parent were not (Brand, Felner, Shim, Seitsinger, & Dumas, 2003).

Children, intellectually, are not equal performance wise. There is a lot of discrepancy between their performances. A number of factors as study habit, self-concept, parent's education, socio-economic status are involved with the performance of children. Along with these gender was a major factor that influenced on child's academic performance (Nuthanap, 2007).

Bibi and Ali (2012) conducted a quantitative study "the impact of preschool education on the academic achievements of primary school students" at

district Peshawar. The findings of the study showed clearly that preschool education prepared children with pre-requisite knowledge which make their learning easier and faster. The study concluded that children having preschool education took part in curricular and co-curricular activities than their counterparts.

Assessment techniques for academic achievement

Assessment techniques are widely used to check the students' performance all over the world. The two types of tests, written and oral are used as standardized or teacher made tests. Written tests are used to assess how student explores his/ her ideas in a written form. The internationally standardized tests, and teacher made tests are the major examples of written tests. Whereas oral tests are used to assess how student explore his/ her ideas in verbal form. Questioning-answering and viva are the examples of oral tests (Broadfoot, 2008).

Effect of Preschool Attendance on Child's Academic Achievement

The structure of preschool education is designed to promote academic abilities and competencies in children that are the indicators of child's achievement. Children, who entered the school with preschool exposure in the language, reading, and mathematics skills, had command over those children who had not attended preschool. Academic benefits which are attained in reading and mathematics achievement remain consistent through all grades for children with pre-school education. Academic benefits are positively related with preschool attendance.

Mathematics achievement: Preschool education has directly influenced on child's mathematics achievement. Several short-term and long-term studies reported that children who had attended preschool had significantly better performed in mathematics tests than the children without preschool education. Winkins (1975) stated that teachers and students while exploring mathematics problems involves guided instructions for better results. He also believed that students' better performance in solving mathematics problems required teacher' s strength and professional skills in order to promote academic achievement.

Science and English achievement: Another strong area of child's development is science. Science is a vital part of education. The main purpose of science during preschool education is to introduce the children to the values and procedures of science in order to develop scientific attitude in them (Byrne & Johnstone, 1987). Preschool education is fundamental in fostering scientific attitudes in the children. Preschool education also influenced on English achievements of child. Barnett and Frede (2010) maintained that investment, vibrant and adequate abilities, parent involvement, nutrition (hearing and visions), systematic methods of

assessment and better intellectual and social developments are considered as significant characteristics of high quality preschool.

Statement of the Problem

The study aimed to find out the effects of pre-school education on the academic achievement of grade one students of public and private schools. Preschool education has a strong influence on the academic growth and development of the children. Its plays a vital role in developing better academic skills in children which they need to excel in life mentally, intellectually and socially. No one can deny the fact that pre-schooling not only bring up a child in a better way but also treat them according to the needs of society and make them civilized and well educated person.

Significance of the Study

The study has shown that there is a major difference in the academic achievement of the students with preschool experiences and those without preschool experiences. This study provided the research base experimental information of the effect of preschool attendance on students' academic achievement through immediate analysis. This is not surprising as a number of studies have shown that early childhood education has significant impact on the academic performance of students. Another positive and important thing is that preschool education has a huge and a greater impact on the students' future achievements and excellent performance in the major and fundamental subjects namely English, Mathematics and Science. This study also identified the areas which are the specific supports, required by the students to improve their academic achievements in their early schooling. Therefore, it is policy-relevant as well. It will help the policy makers to pay more deliberation on preschool education at public and private both levels but especially at public level in Pakistan. It will help them in making curriculum according to the educational needs of the young children at primary level.

This study will also be beneficial for the teachers as well. They will be more focused and devoted with teaching learning process. With changing attitudes toward work and career many parents are in the workforce than ever before. They want quality and affordable care for their children at early age as stakeholders; because it will be possible for them to balance their family and career as well. They will recognize the worth of preschool education. This study utilized the data from a nationally representative sample. With appropriate augmentation, increases the generalizability of the study's findings.

Objectives

The following objectives are framed for the study:

1. To investigate the impact of preschool attendance on the academic achievement of the pupils
2. To compare the academic achievement of public preschoolers and non-preschoolers.
3. To compare the academic achievement of private preschoolers and non-preschoolers
4. To compare the achievement scores gender-wise at public and private sectors.

Hypotheses

The following hypotheses are ensnared for the study:

H_o1: There is no significant difference in the academic achievement between grade one students with preschool attendance and the students without preschool attendance in three core subject areas English, mathematics and science

H_o2: There is no significant difference in the academic achievement between grade one students with preschool attendance and the students without preschool attendance in three core subject areas English, mathematics and science in public schools.

H_o3: There is no significant difference in the academic achievement between grade one students with preschool attendance and the students without preschool attendance in three core subject areas English, mathematics and science in private schools.

H_o4: There is no significant difference in the academic achievement of girls and boys with preschool education and their companions without preschool education.

Research Methodology

Taking into account the vigorous nature of the quantitative studies, the current study aimed to investigate the cause and effect relationship in order to explain the effects of preschool attendance on the academic achievement of the grade one students. The causal comparative study used descriptive survey technique for the selection of the required sample from both public and private sector schools in the district Lahore. The cluster random sampling technique was used to select sample. In order to measure the academic achievement the achievement test was prepared on three core subjects Mathematics, Science and English with the help of Pupil Assessment Instrument (PAI) used in the previous study by Taiwo and Tyolo (2002).

Population and Sample

All the public and private sector schools from the center zone of district Lahore is the population for this study. The study was conducted from 45 schools (23 Public and 22 Private) using cluster sampling technique

in Lahore city. The data was comprised on 502 students. The proportion of the sample according to the public and private sector is as following:

Table 1
Total sample in Public and Private Schools

Schools	*N*	*Preschoolers*	*Non-preschoolers*	*N*
Public	23	168	83	251
Private	22	210	41	251
Total	45	378	124	502

Table 1 shows the total frequency of students with respect to public and private schools sampled for the study. Total 45 schools were taken as sample in which the total number of public schools was 23 (168 preschoolers and 83 non-preschoolers) whereas total 22 private schools (210 preschoolers and 41 non-preschoolers) were sampled. Total 502 students (251 from Public and 251 from private schools) were taken as sample of the study.

Table 2
Gender-wise Total Sample

Schools	*Gender*	*Preschoolers*	*Non-preschoolers*	*N*
Public	Boys	80	41	121
	Girls	88	42	130
Private	Boys	105	19	124
	Girls	105	22	127
	Total	378	124	502

Table 2 shows the clear picture with respect to the gender. The proportion of preschoolers and non-preschoolers in the public and private schools was 251students where 52 boys (43 preschoolers and 12 non-preschoolers) and 72 girls (44 preschoolers and 28 non-preschoolers) and 370 students where 166 boys (141 preschoolers and 25 non-preschoolers) and 163 girls (147 preschoolers and 16 non-preschoolers) were selected respectively as sample for the study.

Instrumentation

In order to measure the academic achievement of the students a test was developed in three core subjects English, mathematics, and science with the help of the pupil assessment instrument (PAI) used. The academic tests for measuring achievement of the students were prepared with the help of national curriculum designed for grade I. Instrument was validated by five experts. In order to measure the internal consistency of the self-made

instrument for academic achievement test, Cronbach alpha was applied and the result was acceptable at 0.78 values.

An achievement test was developed covering three core subjects; mathematics, English, and science for measuring academic achievement. The overall weightage of the assessment instrument for the three core subjects were; English (35%), mathematics (35%), science (30%). The English test was concerned with investigating a grade one student is able to; Write five parts of body, recognize pictures and write their first letter, write at least five lines about him /her, and pick out vowels from given words and the internal consistency of the test items in terms of coefficient of reliability was acceptable at 0.78.

The mathematics test was concerned with investigating a grade one student is able to; Recognize and count number up to fifty, identify between big and small numbers, solve addition, subtract multiplication questions and identify common geometrical shapes and write their names. The internal consistency of the test items using Cronbach alpha was established at 0.71 valued. The science test was concerned with investigating a grade one student is able to; Differentiate between living and non-living things, label the parts of body in a given picture of an animal and name five fruits name. The internal consistency of the test items in terms of reliability coefficient was acceptable at 0.72 values.

Data Analysis and Findings

The data were analyzed in the form of tables. The comparison of achievement scores of overall preschoolers and non-preschoolers, comparison of academic achievement of boys 'preschoolers and non-preschoolers, comparison of academic achievement of girls' preschoolers and non-preschoolers, comparison of achievement scores of private sector' preschoolers and non-preschoolers, comparison of academic achievement of public sector' preschoolers and non-preschoolers, comparison of achievement scores between genders, and lastly comparison of total achievement Scores between private and public school students were calculated and analyzed.

Table 3
Comparison of Achievement Scores of Overall Public & Private Preschoolers and Non- Preschoolers

Subjects	*Student' type*	*N*	*Mean*	*S.D*	*Sig.*	*t-value*
Mathematics	Preschooler	378	17.41	2.766	.004	10.371
	Non-	124	14.19	3.587		9.092

	Preschooler					
English	Preschoolers	378	17.07	3.465	.000	11.476
	Non-preschoolers	124	12.30	5.304		9.301
Science	Preschoolers	378	13.71	1.990	.000	6.259
	Non-preschoolers	124	12.26	2.834		5.245

The above table indicates that in mathematics, English and science tests, the scores of preschoolers were significantly better than non-preschoolers. In mathematics subject, preschoolers got highest mean score of 17.91 than the mean score of non-preschoolers of 14.19. In English subject, preschoolers got highest mean score of 17.07 than the mean score of non-preschoolers of 12.30. In science subject, preschoolers have moderate difference of mean scores of 13.71 than the mean score of non-preschoolers of 12.26. The significant difference of probability was at (p = .004) levels between preschoolers and non-preschoolers' achievement test scores. So it is concluded that significant difference was found in the scores of preschoolers and non-preschoolers in all the three subjects i.e. mathematics, English and science.

Table4
Gender-wise comparison of between preschoolers and non-preschoolers' academic achievement at Public sector

Gender	*Subject*	*Students*	*N*	*M*	*S.D*	*Df*	*Sig.*	*t-value*
Boys	Mathematics	Pre	80	17.63	2.53	117.5	.001	9.258
		Non-Pre	41	14.14	3.415	266		8.228
	English	Pre	80	16.54	3.785	118.9	.000	7.845
		Non-pre	41	12.15	5.019	266		7.015
	Science	Pre	80	13.42	2.117	117.3	.001	3.789
		Non-pre	41	12.23	2.864	266		3.362
Girls	Mathematics	Pre	88	17.20	2.968	51.67	.169	5.410
		Non-Pre	42	14.29	3.934	232		4.524
	English	Pre	88	17.58	3.041	48.77	.000	7.916
		Non-pre	42	12.60	5.860	232		5.360
	Science	Pre	88	13.99	1.818	85.42	.000	4.809
		Non-pre	42	12.33	2.808	232		3.670

Table 4 indicates a significance difference in the achievement scores of male preschoolers and non- preschoolers. It is obvious that male preschoolers had significantly scored better than non-preschoolers in the mathematics and English tests. The scores in science tests were having minor differences of male pre and non-preschoolers. Likewise female preschoolers had significantly scored better than non-preschoolers in the mathematics and English tests but there is a minor difference in the science achievement scores. It is also indicated that preschooler boys and girls are relatively scored better in the mathematics, science and English tests than non-preschooler boys and girls.

Table 5
Comparison of public and private preschoolers and non-preschoolers' academic achievement

Schools	*Subjects*	*Students*	*N*	*Mean*	*S.D*	*df*	*t-test*	*Sig.*
Public	Mathematics	Preschooler	168	17.21	2.421	130	6.233	.174
		Non-Preschooler	83	13.91	3.298	128.894	6.616	
	English	Preschooler	168	17.04	2.653	130	6.792	.000
		Non-preschooler	83	11.80	5.175	122.809	7.630	
	Science	Preschooler	168	13.02	2.206	130	2.192	.019
		Non-preschooler	83	12.42	2.762	126.003	2.074	
Private	Mathematics	Preschooler	210	17.44	2.820	368	5.666	.000
		Non-Preschooler	41	14.70	4.056	47.484	4.304	
	English	Preschooler	210	17.07	3.582	368	6.153	.000
		Non-preschooler	41	13.23	5.47	46.848	4.475	
	Science	Preschooler	210	13.82	1.933	368	5.477	.000
		Non-preschooler	41	11.98	2.972	46.782	3.964	

Table 5 illustrated that there was a significant difference in public school preschoolers' mathematics and English test scores than non-preschoolers whereas having minor difference in science test scores. However, the preschoolers' mean scores on mathematics and English tests showed highest significant difference than non-preschoolers at private sector. The total number of students who attended preschool are higher than non- preschoolers at private sector. It shows quite evidently that high achievers are preschoolers at private sector. The ratio of preschoolers is lower than non-preschoolers but the high achievers were the students who have preschool education at public sector.

Table 6

Comparison of Achievement Scores of Gender

Subjects	*Gender*	*N*	*Mean*	*S.D*	*MD*	*t-test*	*Sig.*
Mathematics	Boys	245	16.59	3.241	.089	.304	
	Girls	257	16.68	3.346			.559
English	Boys	245	15.23	4.640	1.460	3.691	
	Girls	257	16.69	4.160			.067
Science	Boys	245	13.06	2.422	.633	3.122	
	Girls	257	13.70	2.122			.041

Table 5 presented the significant difference in achievement scores between girls and boys. The table indicated that girls scored significantly high in mathematics, English and science subjects than boys. Overall girls are high achiever than boys. Therefore null hypothesis was rejected due to the significant difference between the boys' and girls' mathematics, English and science test scores.

Table 7
Comparison of overall Achievement Scores between Private and Public school students

Subjects		N	Mean	S.D	t- value	Sig.
Mathematics	Private	370	17.12	3.111	5.854	
	Public	132	15.23	3.381	5.627	.801
English	Private	370	16.62	4.033	6.218	
	Public	132	13.90	5.039	5.602	.010
Science	Private	370	13.61	2.158	4.123	
	Public	132	12.66	2.562	3.802	.030

Table 7 shows that the private school students scored better in achievement tests than public school students. It depicts a highly significant difference between achievement scores of public and private sector students at (math: p= .801, English: p = .010, science: p= .030) levels.

Table 8
Multiple Comparisons of Ages regarding Achievement Scores between preschoolers and Non- preschoolers

Subjects	Age difference		MD	Sig.
Mathematics	7	6 – 9	1.40 - 1.866	.002 - .022
English	6	9 – 12	8.353 - 9.000	.011 - .025
	6	9	3.538	.003

	7	6 – 8	1.295 - 1.096	.030 - .040
	9	9 – 12	4.832 - 5.479	.000 - .031
Science	8	7 – 9	1.096 - 3.737	.040 - .001
	10	9	3.853	.028
	12	6 – 7	9.00 - 5.479	.025 - .031

Table 7 shows the evident picture of comparison between the mean scores of preschoolers and non-preschoolers having variability in their age. It is quite evident by the depiction of above measurements that students between the ages of 6-9 years, scored better than the students between the ages of 7-12 years. So, it is proved by the multiple comparisons of ages that students of age 12 or above were considered as dull. On the basis of analysis and of data , the first null hypothesis "there is no significant difference in the academic achievement between grade one students with preschool attendance and the students without preschool attendance in three core subject areas English, mathematics and science" is rejected due to The results have shown that significant difference exist between the preschoolers and non-preschoolers. The preschoolers' achievement in mathematics, English, and science tests was significantly better than the achievement scores of non-preschoolers. It is certainly demonstrated through analysis of data. Preschool attendance is beneficial for children in building academic abilities.

Discussion

The significant findings are made on the basis of data analysis; such as the scores of preschoolers in mathematics, English and science tests were significantly better than the scores of non-preschoolers at ($p = .004$) levels. A significant difference was found in the achievement scores between male preschoolers and non- preschoolers in mathematics, English and science at ($p= .001$) levels. A significant difference was found in mean scores between female preschoolers and non- preschoolers in mathematics, English and science at ($p =.000$) levels. There was a significant difference in the achievement scores in mathematics, English and science of preschoolers and non- preschoolers at private sector at ($p = .000$) levels. Another significant difference was found in achievement scores between girls and boys. The girls scored comparatively better in achievement tests than the boys. The clear picture was depicted between the difference of mean scores of both genders at math: ($p= .559$), English: ($p = .067$), science: ($p= .041$) levels. Private school students overall scored better than public school students due to preschool experiences at (math: $p= .801$, English: $p = .010$, science: $p= .030$) levels.

The study findings approved that preschool attendance has tremendous influence on the academic achievement of the students. These findings were compatible with the findings of the previous research studies

that preschool education not only improves students' cognitive abilities but also provides them a sound baseline to get excellence throughout the life span (Adams, 2008; Bibi & Ali, 2012; Chang, Allen & Skaggs, 2009; Goodman & Sianesi, 2005; Russel, 2006; Taiwo & Tyolo, 2002).

Conclusion and Recommendation

The main purpose of the study was to explain the facts that preschool attendance has fundamental value in the development of academic achievement which essential for the progress and get excel in the life cycle. Though, preschool education has taken a significant place at private sector but there is a need to make it compulsory at public sector also. This study was a little effort to illuminate the importance of preschool education in the development of children in Pakistan. Pre-schooling is an important factor to provide a robust head start to a child at both public and private sector. This is implemented to large extent at private sector but it is giving less importance at public sector because the majority of the society belongs to the lower middle class. They use to send their children in public schools due to fewer fees. The present study will be an effort to provide a realistic picture on the emphasis of preschool education in Pakistan.

The child's education is considerably important along with other necessities of life. The whole education system is organized in institution. Therefore, school has a central element in child's life, because child's over all development is being held in school. On the basis of findings, the following recommendations were made:

1. Instead focusing on higher education level, it is suggested to equip preschool education with adequate considerations and attentions by the policy makers. It would be beneficial for the development of positive attitudes regarding academic abilities at early ages.
2. There is a need to expand preschool and Montessori courses to be compulsory for the teachers in order to teach children according to their individual differences.
3. Preschoolers are significantly better in achieving good scores in mathematics, English and Science than the non-preschoolers. Preschool education has significantly and positively better effect on the achievement scores of the students at public sector.
4. Formal educational process and schooling should start between the ages of three to five. Pre-school has various positive effects on child's educational and learning life. Therefore it acquires much importance in developed countries. Unluckily, in Pakistan preschools are not common, except in the private sector in big cities; however, in public sector preschool needs to be practically exist.
5. Preschools in the private sector are far above the access of middle-class families due to high cost. As a result, the majority of children, from poor backgrounds, do not get access to preschool education, are lost.

The high amount of funds is spending on higher education. Therefore, there is a need to spend large amount of budget on early childhood education.

6. The policy makers must pay attention to provide basics and give priority to preschool education. Government should encourage preschool education by providing educational facilities (Materials, classrooms, equipment) needed for the success. Preschool education should be given importance to enlighten proper movement regarding better educational development of children.
7. The study is the partial fulfillment regarding the effects of preschool attendance on children's academic achievement. Moreover the variables such as parents' education, socio economic status, and study-habits can be investigated with the same problem.

References

Adams, D. (2009). The importance of early childhood education. Retrieved from http://www.helium.com/items/1303715-early-childhood-education-is-the-foundation-for-future-educational-success?

Adams, J. R. (2008). *The impact of preschool attendance on academic outcomes and social and emotional competencies.* Louisville: University of Louisville.

Aguilar, R., & Tansini, R. (2010). *Preschool education and school performance: The case of public schools in Montevideo*. Sweden: University of Gothenburg.

Barnard, W. M. (2001). *Early intervention, parent involvement in early schooling and long-term school success* (Unpublished doctoral dissertation). University of Wisconsin: Madison.

Berlinksi, S., Galiani, S., & Manacorda, M. (2006). Giving children a better start: pre-school attendance and school-age profiles. *The Institute for Fiscal Studies, 5*(2), 45-60.

Barnett, W. S. & Frede, E. (2010). The promise of preschool. *American Educator, 5(2),* 22-40.

Bibi, W., & Ali, A. (2012). The impact of pre-school education on the academic achievements of primary school students. *The Dialogue, 7*(2), 154-159.

Blatchford, S. I., Sammons, P., & Taggart, B. (2010). *Early childhood matters: evidence from the effective pre-school and primary education project.* Milton Park: Abingdon.

Brand, S., Felner, R., Shim, M., Seitsinger, A., & Dumas, T. (2003). Middle school improvement and reform: Development and validation of a school-level assessment of climate, cultural pluralism, and school safety. *Journal of Educational Psychology, 95*(3), 570-588.

Broodfoot, P. (2008). *An introduction to assessment.* New York: Continuum International Publishing Group.

Byrne, M. S., & Johnstone, A. H. (1987). Critical thinking and science education. *Studies in Higher Education, 12*(3), 325-339.

Chang, M., Allen, K., Singh, K., & Skaggs, G. (2009). The effect of social skills on Academic achievement of logistically diverse elementary students: concurrent & longitudinal analysis. Virginia: Blacksburg.

Currie, J. (2001). Early childhood education programs. *Journal of Economics Perspectives; University of California, Los Angeles, 15*(2), 213-238.

Cuti, L. S. (2000). *When is a child ready for kindergarten?* America: Southeastern Louisiana University.

Feeney, S., Christensen, D., & Moravcik, F. (1987). *Who am I in the lives of children* (3rd ed.)? Mcrrill: Columbus, OH.

Felner, A. & Minsuk, S. K. (1995). The effects of family structures on academic achievement. *American J. Soc., 90*(2), 873-901.

Fischer, K. W., Daniel, D. B., Immordino-Yang, M. H., Stern, E., Battro, A., & Koizumi, H. (2007). Why mind, brain, and education? Why now? *Mind, Brain, and Education, 1*(1), 1-2.

Fraenkel, J. R., & Wallen, N. E. (2003). How to design and evaluate research in Education (5th ed.). Boston: McGraw-Hill.

Gay, L. R., Geoffrey, E. M., & Airasian, W. P. (2011). *Educational Research: Competencies for analysis and applications* (10th ed.). India: Pearson Education.

Gordon, M. A. & Browne, W. K. (2008). *Beginnings & beyond: Foundations in early childhood education,* (7th ed.). America: Pearson.

Goodman, A. & Sianesi, B. (2005). Early education and children's outcomes: How long do the impacts last? *Institute for Fiscal Studies, 3*(2), 34-50.

Ismail, S. 1999. *An evaluation study of early childhood education in Pakistan.* Karachi: Hamdard Institute of Education and Social Sciences (HIESS). Karachi: Hamdard University.

Jersild, A.T. (1954). *Child psychology.* New Delhi: Prentice Hall.

Kagan, S. L., Moore, E., & Bredikamp, S. (1995). *Reconsidering children's early development and learning: Toward common views and vocabulary.* Washington, *DC:* National Education Goals Panel.

Knight A., Hughes D., (1995). Developing social competence in the pre-school years. *Australian Journal of Early Childhood, 20*(2), 13-19. `

Iowa School Boards Foundation, (2007, March). *A literature Review: The influence of Preschool Attendance.* America: Pearson.

Loeb, S., Brigges, M., bassok, D., Fuller, B., & Rumberger, R. (2005). *How much is too much? The influence of preschool centers on children's*

development nationwide. Washington: Presentation at the association for Policy Analysis and Management.

Marcinko, D. M. (2004). *The effects preschool attendance has on kindergarten phonological awareness literacy screening*. Unpublished article.

MacFranland, W. T. (2012). T*wo analysis of variance: Statistical tests and graphics using R. America.* London: Springer New York.

Mccabe, J., Fairchild, E., Grauerholz, L., Pescosolido, A. B., & Tope, D. (2011). Gender in twentieth century children's books: patterns of disparity in titles and central characters. *Gender & Society, 25*(2), 197-226.

McClelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academics problems: The role of learning-related social skills. *Early Childhood Research Quarterly, 15*(3), 307-329.

McClelland, M. M., & Morrison, F. J. (2003). The emergence of learning-related social skills in preschool children. *Early Childhood Research Quarterly, 18*(2), 206-224.

Mezieobi, K, A.(2006). Pre-primary education: The dilemma of relevance in contemporary Nigeria. *British Journal of Educational Studies and Society 62*(10): 1-8.

Ministry of Education. (2003b). *National plan of action on education for all 2001-15*. Islamabad: Government of Pakistan.

Ministry of Education. (2007). *National curriculum for early childhood education.* Islamabad: Government of Pakistan.

Ministry of Education. (2009). *National education policy 2009.* Islamabad: Government of Pakistan.

Nadalmani, M. A. (2001). A study of family climate & self concept in relation to academic achievement of students of secondary school. (Dissertation abstract), *Journal of Education, 3*(2), 23-45.

Nuthanap, G. (2007). *Gender analysis of academic achievement among high school students.* Dharwad: University of Agricultural Sciences.

Nuthana, P.G. (2009). *Gender analysis of academic achievement among high school students*. Dharwad*:* University of Agricultural Sciences.

Oghuvbu, P. E. (2010). Attendance and academic performance of students in secondary schools: A correlational approach. *Delta State University, Abraka, Nigeria, 4*(1), 21-25.

Osakwe, R. N. (2009). The effects of early childhood education experience on the academic performances of primary school children. *Delta State University, Abraka,* Nigeria, *3*(2), 143-147.

Osakwe, R. N. (2006). *Understanding teaching profession.* Benin City: Osasu Printing Press.

Perry, J., & Felce, D. (2004). *Assessing work-related social skills: Existing approaches and instruments.* (Unpublished article). Cardiff University: United Kingdom.

Perry, J., & Felce, D. (2005). *Assessing work-related social skills: Existing Approaches and instruments.* Cardiff University: Welsh Centre for Learning Disabilities.

Russell, W. R., & Tran, L. (2006). *Preschool participation and the cognitive and social development of language-minority students.* America: University of California.

Sayeed, A. (2011). *Early childhood in Pakistan: Annual status of education report*. Lahore, Pakistan: Teachers' Resource Centre.

Schumaker, J., & Hazel, J. (1984). Social skills assessment and training for the learning disabled: Who's on first and what's on second? *Journal of Learning Disabilities, 17*(2), 422-430.

Shakil, S. (2002). *An overview of early childhood care and education in Pakistan: An initial survey & situational analysis. (Final report).* Islamabad, Pakistan: Ministry of Education.

Singh, B. (2007). *Preschool education.* New Delhi: APH Publishing Cooperation.

Siu, A. F. Y. (2007). Using friends to cmbat internalizing problems among primary school children in Hong Kong. *Journal of Cognitive and Behavioral psychotherapies, 7*(1), 11-26.

Sylva, K. (1994). School influence on children's development. *Journal of Child Psychol. Psychiatry,* 35(1), 135-170

Taiwo, A. A., & Tyolo, J. B. (2002). The effect of pre-school education on academic performance in primary school: A case study of grade one pupils in Botswana. *International Journal of Educational Development, 22*(2), 169-180. doi:10.1016/S0738-0593(01)00020-7

UNESCO International Bureau of Education (IBE), (2006). *Pakistan early childhood care and education (ecce) programs.* Geneva, Switzerland: Author.

Winkins, E. (1975). Education in practice: A handbook for teachers. In Young, M.E. (1996). *Proceedings of a world bank conference on Early Childhood Development.* London: Evans Brothers.

Young, M. E. (2002). From early child development to human development. Washington, D.C.: The World Bank.

Aga Khan Foundation, (2016). *Education.* Retrieved January 2017, from http://www.akdn.org/where-we-work/south-asia/pakistan

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