COMPARATIVE ANALYSIS OF SCHOOL ENVIRONMENT AT PRE- SCHOOL LEVEL

By

Saba Zahoor

NATIONAL UNIVERSITY OF MODERNLANGUAGES

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Saba Zahoor

BS. Education from University of Azad Jammu and KashmirMuzaffarabad

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ATPRE-SCHOOL LEVEL

Submitted By: Saba Zahoor   Registration #: **1787/MPhil/Edu/F-19**
                        Name of Student

Master of Philosophy
Degree Name in full

Educational sciences
Name of Discipline

Dr. Farkhanda Tabassum   _____
Name of Research Supervisor   Signature of Research Supervisor

Pro. Dr. Khalid Sultan   _____

Name of Dean (FSS)   Signature of Dean(FSS)

Prof. Dr. Aamir Ijaz   _____
Name of Pro Rector (Academics)   Signature of Pro Rector

_____
Date

CANDIDATE DECELARATION FORM

I   Saba Zahoor

Daughter of   Zahoor Ahmed

Registration #   1787/MPhil/Edu/F-19

Discipline   Education

Candidate of **Master of philosophy** at National University of Modern Languages do hereby declare that the thesis **"Comparative Analysis of school environment at pre-school Level"** submitted by me in partial fulfillment of M.Phil. Degree, is my originalwork, and has not been submitted or published earlier. I also solemnly declare that it should not, in future, be submitted by me for obtaining my other degree from this or any other university or institution.

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Dated: April, 2023

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Signature of Candidate

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Name of Candidate

ACKNOWLEDGEMENT

DEDICATED

TO

MY PARENTS

MY HUSBAND MUHAMMAD WAQAQS BINWASI

&

MY BELOVED DAUGHTER

WALIJAH WASI KHAN

ABSTRACT

Thesis Title: Comparative Analysis of School Environment at Pre- School Level

The current study intended to compare the school environment at pre-school level in public and private sector schools of Rawalakot. The objectives of the study were to assess the space and facilities provided in public and private sector pre-schools of Rawalakot and to compare the physical environment facilities included spatial environment, visual environment, acoustic environment and thermal environment facilities in both sectors of pre-schools. This study was quantitative in nature and research design was descriptive comparative. The theoretical framework for the study was taken from the theory of learning environment of Lev Vygotsky (1962). Latterly this theory was used by many researchers. In 2017 there were four sub-variables included in the physical environment theory; spatial, visual, acoustic, and thermal environment. The population of the study was the public and private sector teachers ofpre-schools of Rawalakot. For the selection of sample from the targeted population stratified Random sampling technique was used. The sample of the study were 263 pre- school teachers in which 94 teachers from the public sector and 169 from the private sectors. A questionnaire was made to collect the information and the reliability of the questionnaire was .834. There were 43 item in the questionnaire. The collected data was analyzed by using the SPSS 22nd version. Statistical tests of mean and t-test were applied. It was concluded that the basic facilities of spatial, acoustic and thermal environment were equally available in both public and private sectors while the visual environment facilities were not equally available. It was recommended that the researchmay be helpful to compare the physical environment of classrooms and the affect of environment on learning.

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LIST OF ABBRIVATION

Abbreviation	Terms
Fig	Figure
F	Frequency
M	Mean
N	Total number
NUML	National University of Modern Languages
PE	Physical Environment
PSEE	Pre-school Environment scale
SE	School Environment
SD	Standard Deviation
Sig	Significance (p)

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CHAPTER 1

INTRODUCTION

A positive school environment mainly focuses on physical elements like location, privacy, space, equipment, green area and play area for students. (Shaari & Ahmad, 2018; Mohidin et al., 2015). School environment is a place which impacts the learning abilities of a child in which physical conditions considered are colors, light, air, furniture, noise, stationary, books, decoration and temperature etc. In number of researches conducted about the role of physical environment in a student life, a strong yet positive relation has been found out between physical environment and learning outcomes (Cotterill, 2013).

The process of learning mainly starts from preschool level at the age of 3 to 5. In this level of education and schools, children learn along with playing or physical activities. It is a place for young children to get education before entering into the full time education system. The purpose of this school is to develop the physical, logical, cognitive and social abilities of children. Moreover, these schools and programs are introduced with the purpose of taking care of young children along with building their various abilities through physical activities. In Pakistan, preschool education has now become an important part of education since every school has it. These schools are known by various names like nursery school, Kindergarten, play group, pre-prep, daycare and Montessori school etc. (Matta, 2019)

In various researches, a strong relationship has been found between an individual and his physical environment. The physical environment of preschool includes things like books, furniture, wall paint, light, and space for physical activities, etc. In recent years, a lot of research has been conducted regarding the impact of the physical environment on children

at the preschool level. Researchers have found that the physical environment and things have a significant role in the upbringing of children at the preschool level (Salleh, Kamaruzzaman & Mahyuddin, 2013).

According to research, this school environment means on what level schools are providing safety and health for students. In this physical and mental health, physical plants, proper discipline programs and supported by a related assessment of validity is included. It was also discussed and found from research that poor availability of physical or spatial environment in the schools or classrooms may affect the motivation of teachers and students, and the overall learning of students as well (Salleh et al., 2013). Research conducted on the effects of the physical environment on students' learning has discussed that physical indoor and outdoor plays also affect the learning of students. The students of pre-schools are highly connected to the plays and games that help them to boost their energy and to increase their mental and physical health. According to (Abbas, Othman & Rahman, 2012) it was described that the conducive physical environment in the pre-school classrooms affects the visual thermal, and acoustic environment of the schools. Piagets theory of cognitive development gives a co9mplete framework for the designs of pre-schools classrooms, it also explains students' and teachers needs According to the approach introduced by Reggio Emilia, in which she told that "school environment of children has a strong impact on their learning abilities, stated environment as a "Third Teacher" for young children. Moreover, involving the use of technology and better facilities in the school environment can enhance the creative outcomes in the learning ability and behavior of child" (Carr, 2006).

An environment is not just a place where a person goes around to study or to work but also a place where he feels safe, he found his physical, psychological and societal needs to be fulfilled. In this environment not only social interaction is important but the interaction with physical things also affects the person's way of behaving, perceiving, and thinking. The definition and importance of learning environment have been discussed in several fields

including psychology, education, architecture, and educational fields and all of them have a unique definition of it. Apart from the peoplearound a person, the physical environment also plays a silently equal role in shaping a person's behavior and attitude. Depending on the condition of the environment, it couldaffect a person in either a positive or negative way, impacting the way he or she thinks,reacts, perceive, or behaves in his or her life. The quality of the physical environment, its conditions, and its sustainability are all those factors contributing to the people and activities happening there (Duran, 2008).

It has been found out in research that the effective making and utilization of the physical environment enhances the physical intellectual level of a person. With the development in every sector of life, the importance of enhancing the quality of learningplaces is also taken into account. After several types of research conducted on the relation of the physical environment with Children, the positive relation has made the policymakers and authorities focus on the quality level of the school environment other than social and teaching environment. For our research, it is important to understand the actual definition of the terms School Environment and Preschool first.

1.1 Rationale of Study

Environment impacts the way a person thinks, learns, and reacts towards a specific situation in his life. Similarly, in the case of preschool children, their environment playsa huge role in building their character and fulfilling their educational needs. In the school environment, classroom physical environment matters the most in the overall learning of a child as it is the place where they spend almost half of their day. For this significant reason, the analysis and study of the school environment at the preschool level is very important (Allen & Hessick, 2011) From the past few years, a growing amount of literature has been found analyzing the physical environment of school especially classroom at the pre-school level.

According to the environment and behavior specialists, the design and structureof school matters in the study environment of young children. It is because young students have a very

short attention span and they got easily distracted from noise, inappropriate light, and the colors of the environment. A child who spends most of thepart of her day in a child care institute or at pre-school is likely to get influenced by theenvironment of that place which automatically impacts his learning and behavioral attributes. The physical environment is considered to be a factor that contributes to themeaning of that place and its relationship with that environment (Maxwell and Evans, 2002).

Many people even in today's time of competition think environment does not matter or has an impact on the learning, behavior, and cognitive skills of a child. Theythink educational environment as a box of solid material where the process of learninghappens without acknowledging the value of the physical environment. However, researchers have started giving importance to the role of the physical environment of preschool in the life of children. According to a survey conducted in Pakistan about thephysical environment of preschool in 2013, it has been found that the school environment, location, furniture, noise, layout, lighting, etc. have a very strong influence on the skills of students. However, inequalities have been seen in terms of facilities available to the children of public sector and private sector preschool. In Pakistan, there have been several schools found on the name of Montessori, Kindergarten, or Pre-school but are unaware of their actual meaning.

The schools of Pakistan are not considered diverse in terms of the physical environment to meet the need of children. Moreover, they should focus on this important aspect of the school environment to enhance the interactive and learning skills of the students. In this research, the researcher tried to do the analysis of the schoolenvironment of preschool in Rawalakot Azad Jammu & Kashmir. The researcher tries to address the gap of not having research done on the physical environment of pre- schools of Rawalakot while highlighting the difference between the environment of public and private sector schools. (Ismail et al., 2019).

1.2 Significance of Study

In the time of increasing competition between children, the quality of the school environment matters in academic achievements. For effective learning and upbringingoutside of the home, the quality physical environment of school and classroom is demanded by parents in today's time. There was a time when the physical environmentwas not considered important but now educational institutes have started understandingits importance by analyzing its effect on children learning abilities and behavior. The betterment of the level of school environment should be the core objective of the educational sector to meet the psychological needs of the child. In this study, the researcher highlights the importance of the physical environment for children at the preschool level in developing their various abilities. The conducted research is important for the people belonging to the field of study by driving their attention into the matter of preschool environment. Designers, architecture, and interior designers, allhave a very huge importance in our study since these are the people who bring an openfield or space into life according to the needs and requirements of the place and its people. This research is helpful for them to know about the needs of a pre-school. Physical environment. Moreover, with changing times, the interest and priorities of people have changed. They consider sending their children as a symbol of class for which they look into the physical environment of school the most. Research in this hasbeen very limited in context to Kashmir. The relation of the physical environment withthe children in their schools has not been analyzed the way it should be. This study alsodraws the attention of administrators and policymakers to work and make policy on thisimportant matter this research is beneficial for school administration, teachers as wellas students. Because school administration can easily know about the physical environment and can fill the gaps in their field and the teachers and students can teachand learn more effectively after knowing the value and importance of the physical environment in schools.

1.3 Statement of the Problem

To get a creative learning outcome, it is required to build an environment that boosts the creative and learning abilities of children during the process of learning and experiencing. While the quality environment, being an important part of the school, has been considered unimportant for a very long time by educationalists, teachers, parents, and researchers. According to the national educational strategy of Pakistan for the year 2017-25, similar educational facilities and curricula were made available for both public and private sector institutes. These educational facilities still have not included the formation of an effective physical environment of the school for children and the learning techniques.

The present educational system of Pakistan is considered the colonial system to which early education of children has not given attention on any level i.e. policy- making, administration, and parental. In Pakistan, there have been several schools found on the name of Montessori, Kindergarten or Preschool but they are unaware of their actual meaning. A strong difference has also been found in the public and private sector pre-schools in Pakistan. The children of public sector preschools are not equipped with the facilities a private sector preschool is. Moreover, preschool education is also not gained by all the children within the country, dividing the children into two groups based on their learning and cognitive abilities.

The purpose of this study is to find out and to compare the school environment of public and private sector pre-schools.

In this study, the researcher aimed to analyze the school environment in terms of the physical environment at a pre-school level in Private and public sector schools of Rawalakot Azad Jammu & Kashmir.

1.4 Objectives of study

1.   To assess the availability of space and facilities which constitute the school environment in physical terms at the preschool level in public and private sectors of Rawalakot.

2.	To compare the school environment in terms of the physical environment at a pre-school level in public and private sectors of Rawalakot.

2(a) To compare the spatial environment at pre-school level in the public andprivate sectors of Rawalakot.

2(b) To compare the visual environment at a pre-school level in the public and private sectors of Rawalakot.

2(c) To compare the acoustic environment at a pre-school level in the public and private sectors of Rawalakot.

2(d) To compare the thermal environment at a pre-school level in public and private sectors of Rawalakot.

1.5 Null Hypotheses

$H_0$2:	There is no significant difference in the physical environment of public andprivate sector at pre-school level in Rawalakot.

$H_0$2a: There is no significant difference in the spatial environment of public and private sector at pre-school level in Rawalakot.

$H_0$2b: There is no significant difference in the visual environment of public and private sector at pre-school level in Rawalakot.

$H_0$2c: There is no significant difference in the acoustic environment of public andprivate sector at pre-school level in Rawalakot.

$H_0$2d: There is no significant difference in the thermal environment of public and private sector at pre-school level in Rawalakot.

1.6 Theoretical Framework

The theory of learning environment had been introduced by a Russian teacher and Psychologist, Lev Vygotsky in 1962. Later in 2017, M. Ali conducted a study in whichhe discussed the physical environment of schools and used the Vygotsky theory in his research.

Going into further details of the physical environment, it includes four sub-variables spatial environments, visual environment, acoustic environment, and thermal environment. In this research, the theory of the learning environment is strongly linked to its physical environmental aspect. The factors of the physical environment include the utilization of space, furniture, seating arrangement, colors, lighting, temperature, and voices. The researcher analyzes all of these factors on how they impact orcontribute to the pre-school level children learning ability. In other words, we are tryingto figure out the relation of pre-school level children with their physical environment.
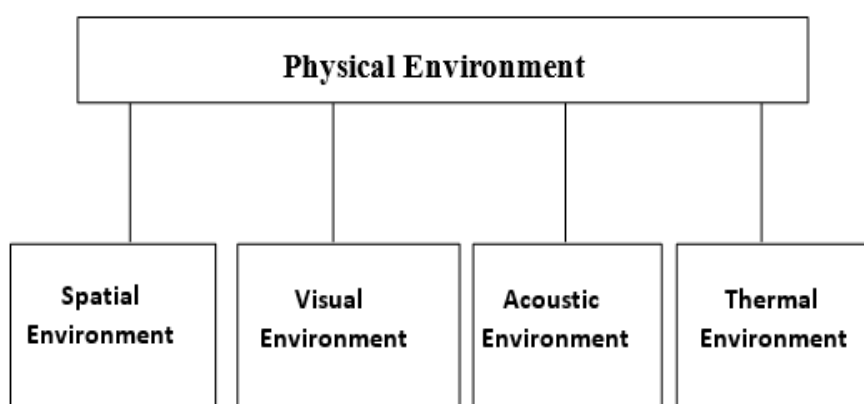
Fig No 1: Theoretical Framework of School Environment by Ali *(2017)*

1.7 Operational Definitions

1.7.1 School Environment

A place or environment where a student gets to interact with the physical, social, and emotional world outside of his home.

1.7.2 Preschool

Schools in which children of 3 to 5 years' age go for learning while playing.

1.7.3 Physical environment

Things in a person environment with which he physically comes in contact with and experience observation, learning, and other behavioral elements.

1.7.4 Learning

A process of seeking a way to communicate thinks, react and explore things and peoplearound you.

1.7.5 Behavior

The way an individual think, react, communicate and perceive things around him.

1.7.6 Classroom

A place where children do to learn and explore their skills during their interaction withpeople and things around them.

1.7.7 Space

The area is available to children inside of their classroom to freely move and interact with the environment and people within.

1.7.8 Noise

The quality of sound of learning objects within the classroom includes the teacher's voice, speaking toys, and other audio objects

1.7.9 Lightening

The quality of light available to children for learning, performing and interacting for aclear vision of things in the environment.

1.7.10 Seating arrangement

The arrangement of seats and furniture in the classroom for the interaction of children with teacher, class fellows, and the various elements of the surroundings.

1.7.11 Spatial Environment

Spatial Environment includes the three main dimensions to be included as the physical environment as space in classrooms, the seating arrangement of the classroom, and the density of the classroom.

1.7.12 Visual Environment

The visual environment includes the things in the classroom as the lightning, the colorof the classroom, and the displays of the classroom may be made by teachers or the students for the class décor.

1.7.13 Acoustic Environment

The acoustic environment includes the services from the teacher to the students in the classroom as the audible voice of the instructor, the control of the teacher on the noisein the class both eternally and externally included. Internal noise includes the noise made by the students by the movement of chairs or the gossip of students and the external noise includes the noise that comes from outside of the class as the noise of traffic horns, movement of the vehicle, and the voice of other students outside the classroom.

1.7.14 Thermal Environment

The thermal Environment includes the environment of the class like the temperature ofthe class. It states that the temperature of the class affects the learning of the students. The temperature of the class must be reliable for the students both high and low temperatures affected the learning. The Normal temperature is required for smooth learning.

1.8 Research Methodology

1.8.1 Research Approach

The research approach used for this study is quantitative research. Statistical Analysis was used for the collection of data. Therefore, the researcher uses a quantitative research design in this research. The researcher used quantitative data for a collection of data in the numeric measurements to find out the relationship that exists between thephysical environment and children of pre-school. Whereas qualitative method is used for collecting data not based on numbers only but the narrative or perspective of peoplecollected through a personal survey.

1.8.2 Research Design

In this research, the researcher aimed to analyze the role of school physical environmentat a

pre-school level in Rawalakot, for which the researcher investigates the experienceof teachers of public and private sector pre-schools. The research design used in this research was descriptive comparative research. The descriptive comparative research design refers to the research study which describes and compares the characteristics ofconducted research in detail. Descriptive comparative research design answers what and how type questions. It also compares the mean score difference. It commonly describes quantitative research data.

1.8.3 Population

The population for this study is the public and private sectors teachers of pre-schools of Rawalakot. The population for the study included 706 teachers from the public andprivate sector pre-schools of Rawalakot. A list of the schools was selected with the helpof the Ministry of Education of Azad Jammu & Kashmir. There were total 453 schools in Rawalakot. Public and private sector school teachers from the given list are selectedto collect the data. The details of selected schools and the teachers from public and private sectors are given below in the form of a table.

Table1.1

Population of the study from the teachers of public and private sector preschools at Rawalakot

Sr. No	Sector	Number of Schools	Number of Teachers
01	Public	157	227
02	Private	296	479

Table 1.1 showed that there were two sectors public and private, the number of schoolswere 157 public sector schools and 296 private sector pre-schools. Total number of schools were 453. The number of teachers from the pre-school level was 227 public sector teachers and

475 private sector teachers and the total number of the teachers were 706.

1.8.4 Research Sample

The sample of this study is based on the selected population for the given study. Ten pre-schools from the public sector and ten pre-schools from private sectors are selected as a sample of the study. From the selected population the targeted sample is selected and data is collected from the 70 respondents for pilot testing. The teachers from both sectors are chosen for the collection of data. School working hours are selected for the collection of data for easy access to the classrooms and the teachers.

Table 1.2

Research Sample of the study

Sr. No	Sector	Number of Schools	Total Respondents Teachers	Teachers Rate of Return
01	Public	10	30	22
02	Private	10	40	38

Table 1.2 demonstrated that there were 10 pre-schools from the public sector and 10 pre-schools from the private sector. The total number of respondents was 70, thirty (30) respondents were from the public sector and 40 respondents were from the private sector. The rate of return was shown as 22 respondents were from the public sector and 38 respondents were from the private sector.

1.9 Research Process

Since researcher uses two methods for collecting data, firstly data collect by using the questionnaire with a checklist for the teachers and principals of pre-schools moreover the researcher collects the views of teachers and principals about what they think of the availability of physical environment facilities of classroom and its relation with the children. Secondly, the researcher uses a personal survey method to collect the data for the comparison

of the school environment of public and private sector pre-schools in Rawalakot. In the physical surveys, the researcher gathers data about the availability offacilities within the classroom, their quality, how frequently they are used, and their visual impact on children studying there. During the personal survey researcher also getto observe the behavior of children, their interaction with physical objects, and their interactive approach with each other while being in contact with physical objects.

For the collection of quantitative data, the researcher analyzes the previous literature and work done on related research topics.

1.10 Data collection

The research method chosen for our research involves physical surveys and questionnaires. To evaluate the quality of the physical environment of pre-schools in Rawalakot, surveys of various pre-schools needed to be taken. Since no information has been found about the condition of the physical environment in the preschool through physical surveys, this physical survey included a checklist filled by the researcher during the survey of the schools. This method in our research fills in the gap of previously conducted researches. The second method is the use of a questionnaire. These questionnaires were disseminated to the people. The questionnaire made, get answered by the teaching staff of the schools.

The process of data collection is started by selecting the names of pre-schools from thedata of the Provincial Ministry of Education, Azad Kashmir. Along with the selection of schools, a suitable time is selected for it for easy access to the classroom and teachingstaff. For a collection of data through personal surveys, it is conducted during school timings to get easy access to the classrooms and collect data easily. The material required for physical surveys and questionnaires is prepared in advance. Formalpermissions are also taken from the school's authorities in advance to easily get the surveys done.

1.11 Delimitation of the study

1. Only preschool level teachers from the schools of Rawalakot were selected as the

participant for the current study.

2.   Only the class teachers of preschool level students were the participants in the study.

3.   Only questionnaires and checklist were used to get the response about the environment of the school from the teachers.

1.12 Summary of Chapter

This chapter demonstrates the information about the current study. It gives informationabout the rationale of the study, the significance of the study, the problem statement, the objectives of the current study, the hypothesis related to the objectives, the theoretical framework of the research topic, operational definitions, the research methodology, population of the study, its sample size and the sampling technique usedin the research for collection of data, the research process, the way of data collection and the tool used for the collection of data, and the delimitation of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 General background of the Study

In social sciences, the interactive relationship between individuals and their environment is of huge importance. Firstly, by getting into the contextual and deeper meaning of environment, it is anything that is around us and within it and each element of it has some impact or influence on us in the form of our behavioral change, productivity and perception. According to the definition of Cambridge Dictionaries, environment is defined as 'The conditions that you live in or work in and the way they influence how you feel or how effectively you can work' (Dictionary, 2015).

Buildings are designed in a way, keeping in mind that they shape our thinking, perceptions and the mind as overall. Environments designed for individuals to learn have a direct and indirect influence over the learning and behaviors (Crawford, 2013). A perfect educational environment for children has been defined as to be a place which is composed of natural and cultural elements in a way that fulfills the learning needs of mind, body and soul. Jonassen and Land (2012) have described environment as something that builds connections between individuals and things around them. In this, things include furniture, colors, light and arrangement of those things and in this why the quality of environment around individuals' matter.

Number of documents and researches has been present on the impact of childhood learning environment on their behavior. Preschool is an important part of children development rather than just considering it as a time before formal schooling. With the increasing interest of teachers, parents and researchers in the pre-school education quality, the importance of

developing suitable learning environment is also taken in account as good learning environment is considered as a foundation stone for the life a head.

A research has shown that the demand for childcare facilities in pre-schools hasbeen found to be increasing in the recent years. With the increasing trend of pre-school,an average child spends as many as 12,000 hours of his life before entering into formaleducation schools. As the demand for pre-schools in increasing it is making researchers questions if their environment is adequate enough for children to build their perceptionabout things around them. It is because the environment really molds the way to be either positive or negative. An environment designed with proper consideration of preschool children will lead them towards more interaction and involvement with theirsurroundings, enhancing strong learning behavior in them (DeCraemer et al., 2015).

Within these educational institutes, physical activities for children are considered to beof very much importance because greater the physical activities, greater will be the chances of physical, social and psychological health (Timmons et al., 2012). The age in which children go to preschool is the age in which they have rapid development andlearning as compared to other periods of their lives (Logan et al., 2015). This development within children demands having continuous interaction of children with their indoor and outdoor environment elements (Wick et al., 2017).

2.1.1 History of preschools

The concept of preschools has been introduced to the world by Europe and is also known as nursery schools. The origin of them was England where such schools were built in order to explore, enhance and strengthen the mental, physical and other learning behaviors and necessities of children. The perfect age for these schools is considered above two years and of almost five years. The first such school for infants was founded in 1816 in England by Robert Owen. With the expansion of concept of preschools, in the beginning, they were privatethen went for profit, charity, laboratory and parents-cooperated schools. The strong

concern was shown towards the need of preschool during the time of World War II andpost-World War II. The need for them was felt to provide jobs to the unemployed elementary and high school teachers. Later in 1940s, proper funds were provided by thegovernment to start nursery schools in order to provide jobs to the women whose husbands were at war or are missing. With passing time, the need for these schools hasbeen increased by private funding for them in order to meet the need of teachers as wellas of children (Oleson et al., 2013).

By Froebel, the first kindergarten school was established in 1837 in Germany. In order to achieve the proposed objectives of him, he designed a curriculum which involved different materials such as sand and clay to enhance the learning of children.

2.1.2 Preschool Child

A child having an age of two to five is considered as appropriate for preschool level. Itis the age during which a child starts getting verbal. This is considered as the age wherechildren start to learn and interact with children of their age. Their interest in writing and reading books increases (Wick et al., 2017). This is the age where a person is considered brave, friendly, and easy to interact and enjoy new experiences.

Children of preschool age can grasp simple and easy concept at their age. This age has three characteristics i.e. the first one is centration. It means that they give one meaning or attribute to a thing at a time. For example, a father is taken as a father by them but not also a son of someone else. The second characteristic is egocentrism whichmeans the child thinks that this world revolves around them and the third one is animism which means they consider everything around them as human beings who can perform all the tasks a human is capable of doing (Logan et al., 2015).

Preschool age children enjoy time being away from their home with other children of their age especially when they are getting individual attention on their performance. However, they act differently when they get tensed and frustrated on not being able to perform certain task. Preschoolers are at the age of their life where they are smart and highly cable ofadopting

new things. If their abilities are polished properly during the time being, it will last with them forever. Moreover, they are good in making things out of raw material such as clay, sand, wood and paint (Barnett et al., 2016).

2.1.3 Child's View of Environment

Considering children perspective in understating their environment is very important. Children look towards their parents and teachers as people who can understand their emotions, needs and interests. It is important to understand how children look at their surrounding and what does various things in it means to them. A researcher stated thatthere is a huge difference between how a child sees his environment and how an adult means and sees those things (Cook and Hess, 2007). In the study of Hannah (2013), experience and understanding of things by children of pre-school taken to a trip was recorded. It was found out that children have a totally different understanding of thingsaround them as compared what was expected by adults. A lot of importance is not started to give to the understanding of children abouttheir environment and their perspective about it. This interest shows that the perspectiveand knowledge of children is also of great importance because they have the kind of knowledge which can be considered expert at their age. In order to give openness and space to their perspective and view, it is required to give them enough opportunities where they can think openly, make choices and experience new things (Tonge et al., 2016).

2.1.4 Early childhood education

Early childhood education is of great importance because a child entire development depends on it. Children learn much better and faster while playing so their early education should be done in a friendly atmosphere in order to get their proper linguistic, social, cognitive, behavioral and educational development in the early ages (MclIraith,2018).

Early Childhood Education(ECE) is considered as a solid foundation stone for both theformal education as well as the future (Dahlberg and Moss, 2015). This education is considered an opportunity for poor children who can get rid of their poverty by maximizing their skills and

abilities for future. ECE is also known as Kindergarten, Montessori and Nursery education for children of age 3 to 8 years old. It is also definedas a developmental program for children aged between 0 to 8 years who are trained to perform good in their formal education as well as in their future life (Logan et al., 2015).ECE is considered a form of education which helps build a child's personality and howhe will experience and interprets things in the future. In the recent times, this level of education is considered not only a form of educational learning but also a form of education which will shape the attitude and behavior of child for his entire life. It is generally considered as an education which develops a person both mentally and physically. Moreover, it not only makes a child prepare for the formal primary education but also makes him a better person in his future by helping him develop physically, mentally, emotionally, cognitively, socially and personality wise. As Prophet Muhammad (S.A.W) said that one should seek for knowledge from cradle to the grave, so it shows that this need has been evident in human from years (Petric et al.,2019).

Early childhood education is considered as education which is the beginning ofthe real learning, or a place from where the actual learning begins and this is what develops a child vision about community. Being a very important part of a child futureeducation, early childhood education is the most neglected level of education inPakistan. No policies, rules and regulations are present regarding the promotion and planning of it and the reason of which is the negligence by ministers and other officials(Ministry of Education, 2003).

To ensure quality and necessary childhood education for children, specialcommunities and agencies have been made to fulfill the need of children for Early Childhood Education. The legislative step towards ensuring proper ECE to all childrenhas validated its importance. During the process, parents and professionals werebrought in contact in order to have communication to look deep into the matter. This step has prominently affected the quality of ECE. Proper communication between parents and teachers is very important for the Early Childhood Education because stressmakes teachers and parents insensitive towards children

in terms of care and other needs(Melhuish, 2016).

In today's time, an important search of most of the researches is how do childrenlearn to read? On understanding the concept, psychology has participated by telling thatit is done by making children know what needs to be learned and is divided into varioussmall tasks which makes them slowly reach the required response. This shows that childbegins to read by dividing things into parts and then obtaining the whole outcome. As child started to grow older he starts identifying various emotions like sadness, happiness, verbal and non-verbal communication means. The age between two to five is the time during which child learns a lot especially while playing. In a classroom, in various corner or areas like play area, reading area and dress-up area, he comes in contact with various materials and develops his cognitive abilities while playing with them. The emotional intelligence of children plays a significant role in their academic development. It is required that during ECE, the emotional and character building of children must be looked after explicitly in order to have good academic performance (Gifford, 2014).

Since the formation of Pakistan, governments have been trying their best to get 100% of school-age children to get into schools for primary and secondary education. Early Childhood Education (ECE) has been recognized by NAP as an important sectorof education which needs attention (Government of Pakistan, 2003). The aim of it is tomake this basic level of education assessable to all children of country for their better future. The concept of Early Childhood Education is not new in Pakistan as it was givenquite significant importance in the nineteen seventies. These classes were named as Katchi (Pre-primary classes). Pre-primary classes were arranged for children aged 3 to6 but the system was later postponed in the 1980s. Children were taught in a very basicand formal way where teacher stands on the board and make children learn things. In contrary to this, private sector pre-schools and Early Childhood Education system, therewere complete facilities to the elite class children. The system of Katchi classes was arranged properly from 1992 according to National Education

Policy. There were still no proper facilities, resources and material available for it because of which just a 10% of children aged 3 to 5 were enrolled. By the year 2000, the number of children aged 3 to 5 were in number of 8.61 million which showed the increased need for ECE in Pakistan. The program of ECE was given importance and proper facilities in 2003 by National Education Policy (Government of Pakistan, 2003).

The budget and resources allocated for ECE was not sufficient to fulfill the needs of 8 million above children of various ages and backgrounds. There were no proper resources available including classroom, teachers, water, and basic materials required for pre-school education was there. The reason of it was mainly poverty, a factor which does not let a nation progress, fulfill the requirements of children and provide them security including education (Ahmed, 2011).

ECE was mainly introduced in 1970s in Pakistan but due to lack of attention and concern caused cessation of it by 1980. Despite of these issues, the teachers continued the education of children without considering the need and requirements of their age. The system in private sector schools were quite different from government sector schools where system of Montessori schools was followed which fulfills the requirements of elite and middle class children (Hunzai, 2007).

According to National Education Policy Review of 2006, there were almost 19 million children of age 5 to 9 out of which 6 million never got registered for any educational platform. Out of these 13 million, 45% people don't even complete primary education and leave schools. In addition to it, 30% people drop out of school before they even complete their secondary education. An analysis has been conducted by Syed, Asif and Yousaf (2011) on the current ECE. He stated that improvement is required in the overall curriculum of ECE including the education, training and resources. Moreover, a paradigm shift is required in it. A comparison has been made between the public and private sector schools providing ECE and a major difference has been found in the physical needs provided there to children. No care was taken

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of children in publicsector schools about the physical needs of children including water, seats and basic learning materials (Rehman, 2015).

At Early Childhood Education, children should be provided with anenvironment which helps them to develop and nourish their selves. There are several reasons like proper policy implementation, fostering, lack of resources, lack of seriousness and most importantly lack of understanding the importance of Katchieducation has made our ECE low value (Government of Pakistan, 2009). A studyconducted on the nine districts of Punjab has stated that ECE is a vital form of educationfor children in their future. Moreover, the teachers play a very important part in it byorganizing activities for children regularly, by fulfilling their educational needs and byusing variety of teaching techniques (Ghumman & Khalid, 2016). So, in Pakistan, EarlyChildhood Education has a long way to go to reach the level of quality ECE. Children, worldwide, spend a huge amount of their childhood in child care centers for their early development. These child care centers should be o good quality as it impactstheir development. There are various parameters by which the quality of child carecenters can be measure but generally the range and quality of materials present there inthe educational setting for their development is the one (Zaslow et al., 2011). There isan international agreement present about what are the requirements for properdevelopment of a child in child care (Lamb & Ahnert, 2006). The elements consideredimportant for quality child care development is the presence of healthy and safe setting,positive interaction with adults, developmental learning activities and positive relationwith their fellow children (Lehrl & Smidt, 2018).

Different levels are used to assess the quality of child care around the globe. The widely used level is the Environment Rating scale which refers to measure the process setting in the early child care setting. Process setting refers to child interaction level and quality with its environment i.e. interaction with people around, material andother activities. The assessment of process setting is done through observations and bychildren performance.

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2.1.5 Classroom environment and design

Environment has different definition and importance towards different people. Some people think it as an ordinary component of our life but for teachers, parents and children it has a significant importance. Environment, according to Vickerius and Sandberg (2006), is physical environment, the surrounding and specific setting of objects around. The physical environment of each place or classroom depends on the number of children, their age, their mental level and their kind of activities. For example, for infants, their classroom will include areas like play area, sleep area, eating area, diapering area and study or learning area. Out of all these areas, play area is of vital importance and should be designed keeping in mind the important aspects like how they will grasp things in their surroundings, their interaction and assess towards toys and how they will practice walking and standing. For the supervision of infants, it is suggested that all of their activity areas should be in one room including the sleeping area. However, some researchers suggest that sleeping area should be separated from the play area. The researcher who supported the idea of having sleeping room in the same area have stated that sleeping pattern of children are not affected on having sleeping and play areas in the same room. Making infants the feel of having home like environment help develop their learning, social and behavioral attitude (Baroody & Diamond, 2016).

Toddler's classrooms include various areas for sleeping, eating, playing, diapering and toileting. They are on the way of learning, exploring and experimenting new things in their surroundings. They always look for new opportunities to learn new skills and develop their cognitive abilities and strengthen them.

Just like a toddler's classroom, a preschooler has the similar needs. The only difference of area in the pre-school and toddler's day care center is not having diapering areas because they are ahead of this need. However, they include some other areas related to art, science, mathematics, music, drama and literature etc. Regardless of the culture, beliefs and norms, children love to study and spend time in classrooms where they feel good, happy and

energetic. A classroom should haveenough space for children to move freely so that they can interact and explore things intheir environment. The environment should be according to the age and mental level ofchildren. In an environment create for children development should have a learning space, place to sleep and play with the feeling of care and security. In an environment like this, a child feels himself freer to explore and interact with the surrounding for thebetter understanding of things later on (Olds, 2001). Happiness in children is a considered a reason for them to explore and develop cognitive skills.

Classrooms are designed in a way keeping the number of students to be there and the types of activities they will perform. For classroom design, Olds (2001) stated that:

"A facility that work well for children and staff must be designed from the inside out, and also from outside in, with structural evaluations. The architect is concerned with the type of building and its outlook, mechanical and electrical systems, corridors, exitsand overall public use space."

In designing of classroom or space of young children several aspects of belonging, love, care and security should be kept in mind as it is while making of a house. The architects should establish a classroom environment on consulting the parents and teachers in order to know well about children needs. An intellectual designof school and classroom can enhance the self-esteem and feeling of belongingness in children. It is because by enhancing self-esteem and feeling of belongingness, childrenfeel free to interact which helps them develop various skills in them. Once thearchitectural work of school and classroom is completed, it is teacher's and care takers responsibilities to make it attractive and pleasing for children. It is thought as the environment which is visually appealing, attractive and colorful makes children exploretheir surrounding (Isbell & Raines, 2007).

The environment of classroom is of considerable importance because it is the place where a child spends considerable amount of time in a day. There are four factorshighlighted by De Bruin-Parecki, 2008; Greenberg and Rodriguez, 2007 which can improve the quality of

environment for children. First factor is creating an environmentwhich is interesting and engaging for children while fulfilling their basic of learning and cognitive development. Second factor is accepting the diversity of children in theiropinions and encouraging them to participate. Third element is arranging a number of activities for them time to time to keep them active and the final factor is having a richlanguage environment in classroom.

2.1.6 Child friendly environment

Child friendly environment has been defined differently by different authors andresearchers but the main idea of all of them was similar. According to one of the researcher, it is defined as: "Child friendly environment aims to develop a learning environment in which children are motivated and able to learn. Staff members are friendly and welcoming to children and attend to their health and safety needs." (Young,2002)

Learning is a process which continues throughout the life of a human being i.e.from birth till death. A child who has proper physical, mental, emotional, cognitive and intellectual development will tend to be a happier, healthy and productive person of a society than a person who has not. Mustard (2002) stated that a child who has poorphysical, mental, emotional and cognitive development will have poor brain development as grows older. It affects the brain by lowering its cognitive and other learning abilities along with affecting the immune system. For the complete development of all the skills and abilities within a child, it is required for a teacher to build friendly relationship with him/her and this also depends on the knowledge and skills of teacher. This shows the importance of teachers in the early childhood educationof children. Moreover, it is required for them to keep pace with the latest education trends and strategies in order for them to teach children more effectively. According toa research, it has been stated that a teacher personal and professional growth has the most impact on children development, behavior and self-confidence.

Classroom cannot be simply taken as a place to learn and polish academic skillsbut is more about developing social relation, bonds, understanding emotions, friendshipand learning

cooperation. In this teacher plays a significant role by making childrenknow about the value of them by experiencing it with their friends (Lee, 2006). One ofthe possible ways of maintaining a friendly environment is by making the classroominteresting, sustaining that interest and then extent it. It will make children stayinterested and help them develop friendly bond with their fellow students and teacher. The way a teacher sees the children is very important in forming a child friendly environment. A teacher is required to view his children as strong and competitivehuman rather than weak and needy. It is because it makes him not to punish them bykeeping in mind the affect it will cast on children development. Jamal (2007) stated thatphysical punishment casts a negative impact on the psychological development ofchildren including self-esteem and confidence and also hinder their cognitive growth.It also leads them to depression, anxiety and aggression which not only harms them butalso to the people around them. People who had been exposed to physical punishment in their childhood are prone to have suicidal thoughts (Kaplan, 2006).

Teachers and children both play their role in forming a friendly environment but the most important role is of practitioners and teachers who have to make children feelsecure and encourages. This will make children have the feeling that they will be encouraged on their performance (Skinner, 2007). Yunus (2003) stated that giving children equal learning opportunities and development will make them all grow in the similar manner regardless of their actual background. The finding of him shows that opportunities are required for children to help them develop into a positive human being.

Children play a vital role in the development of their own intelligence and it is possible if they are provided with the appropriate friendly environment where they candevelop their cognitive abilities by being an active participant. It is possible to achieveby giving children the freedom to explore, experiment and learn with the materials present in their surroundings. The materials and equipment present in different areas oftheir classroom must be handy and

easily approachable by them (Sadu, 2004).

2.2 Model of Pre-school Environment

2.2.1 Physical environment in preschools

Physical environment at first has been derived by Lawton into two i.e. the objective physical environment and the subjective physical environment. Objective physical environment is everything that resides outside of the skin of the participant or child which can be measure in grams, centimeters. This includes toys, chairs, window etc. moreover, the physical environment is not always characterized by the objects and materials available in the environment but is mainly about the relationship that exists between the environment and its inhabitants.

The type of physical environment both indoor and outdoor has a great potential of increasing or decreasing child's physical activity. The more the physical activities of children, greater is their physical, emotional and social development (Timmons et al., 2012). The age between 2 to 6 is considered as the age of rapid and strong developmentand learning of a child where he can develop various motor skills (Logan et al., 2015; Stodden et al., 2008). To develop motor skills in a child, it is required for him to beingin a continuous interaction with the indoor and outdoor environment including variousmaterials, different surfaces and sufficient space for movement (Wick et al., 2017). Children who have developed or are interested in motor skills are tend to be more activethan other children (Loprinzi et al., 2012). The relationship between physical environment and motor skills of classroom is directly proportional to each other(Barnett, Salmon and Hesketh, 2016). It has been found out that most of the children lack the required physical activities in the daily life and there is a need to solve the issueby modifying the physical space to provide required opportunities to them (Beets et al.2011; Okely et al., 2009; Tucker, 2008). Pre-schools are considered the most suitable place to increase the physical activities of children and account for 14 to 47 percent

ofa child physical activity (Olesen et al., 2013).

There are several factors like social interaction, physical environment and policy regulations which impacts a child physical activity in pre-schools. In numerousresearches conducted on pre-schools, the element of physical activity is studied alongside (Tonge, Jones and Okely, 2016). A study stated that children having requiredspace for physical activities, required materials and optimal conditions to play have higher physical activities (Broekhuizen et al., 2014). Composite scoring has been usedto describe the quality of physical environment but no specific information has been provided yet by the researchers that what is required in a physical environment to increase PA of children. A researcher stated in his research that riding toys and small play area can significantly reduce children PA level (Gubbles et al., 2012).

Gender is somehow also identified as a factor which defines how active a childwill be. So at pre-school level boys are considered a lot more active than girls (Bingham et al., 2016; Hesketh et al., 2016). Although the factor of gender has never been studiedwith the PA level of children but in several studies it has been found out that on hard physical surfaces boys are found to be more active (Cardon et al.,2008).

Curriculum has always been considered most important while planning and considering classroom issues but planning a physical environment should be given the most priority because it will be going to contribute to the efforts of teacher as well as children. According to Wolery (2004) "Intervention and educational programs are manipulationof children's environments; thus understanding those environments is central to makingdecisions about using assessment results in planning children's individualized intervention programs".

It has been evident in various researches that classroom physical environment is important for children growth. If the environment is poorly arranged, it will affect thegrowth and development of children. The environment of classrooms of pre-schools especially are designed with a lot of care keeping in mind all the aspects and issues which can hinder the

learning and behavioral development of children (Duke and LamerDukes, 2009). It can lead to number of problems in development of child socially, emotionally, physically and psychologically. To avoid these drawbacks, it is importantto consider the drawbacks of having poor physical environment on children.

Physical environment along with the right curriculum can make a child responsible, thoughtful of his actions and take care of himself. A good physical environment can make a child explore new things, make choices and communicate withother actively. There are three elements of a positive physical environment i.e. enoughspace for teacher to observe class activities, functional and secure for both teachers and adults and provides maximum freedom to children to explore their surroundings.

2.2.2 Spatial Zoning

Spatial zoning is defined as an open or close area for various learning activities. A researcher has defined a good spatial environment where the goal of one activity can beaccomplished successfully while combining with the elements of boundaries andlearning. On the other hand, a poor spatial area is defined as where there is no proportionand definition added in the surrounding.

Kemple (2004) stated that children can perform better in the activities assignedto them depending on the spatial arrangement of their surroundings. A child surrounding can affect the way he feels in being secure and comfort and this feeling canbe encouraged by giving them proper space and material in there. Properly designed special areas enhance the social interaction of children with each other and their surrounding and thus decrease the level of aggression (Kemple, 2004). The spatial areasare further divided into open and close areas in various researches.

2.2.3 Open and close spatial areas

An open spatial area is considered as an open and structure-free environment for children (Trawick & Smith, 1992). An open plan area is where there are either few walls or no walls

at all whereas a close plan area is where there is a closed space having a hallway or are interconnected with other such spaces. There are varied views that exist between researchers about open plan areas. Some believe that an open area enhances communication, learning and interests in children about their surrounding (Gregory, 2002) whereas other believes that it makes the children distract from the actual learning activities. Open areas are considered to be having more traffic than close areas increase the chance of accidents and leads to aggression in children. Open plan areas are prone to noise, aggression and other distractions for children from educational activities, it will also cause significant negative effect on them. Indoor and outdoor environment are made to make children interact with their surrounding through safe, interesting and healthy challenges for them. However, appropriate space should be provided to them for it to ensure free movement during their activities. Making public and private sectors in pre-schools and child care center is of great importance and should be paid great attention. Places created for group activities must be wide and broad and should be made away from the sleeping areas of children. Noise can be created if the areas are not divided properly (Maxwell & Evans, 2000). Children need space to move around, to play, to interact and experience things in the environment but the space created for them should be appropriate in size where they feel safe, secure and free to move. They love to have outdoor activities because during that time they explore things and create imaginary world out of them (Tover, 2007). Every child care center or pre-school must have enough space for outdoor activities but if it does not have it then there should have enough space for indoor motor activity to fulfill the need of outdoor space. There are four elements which if utilized properly can enhance the spatial organization of classrooms. Those four elements include organization, complexity, variety and activity. The first organization is the most important because it can bring so much positivity in the classroom for children. To have proper organization in room it should be made clear that all paths are clear of obstacles for children in order to interact with surrounding they want. There should have proper boundaries

assigned to each area and the material within them should be easilyassessable to them. Moreover, there should have enough space for a child which is clearof any material to make them feel less crowded. Complexity in the environment of classroom enhances children interests within the space. This complexity can be improved by having things which have more than one clear meaning to them. However, the balance is required between the right levels of complexity for children. Third element is variety which reduces boredom and enhances creativity in children but it should be in an appropriate level. Last but not the least; a good number of activities should also be there to make children choose between them. However, enough space should also be provided to children for them.

2.2.4 Activity areas

An ideal classroom is the one which has enough space for children to perform their activities freely. They should have tables suitable for each of their activity rather than working on individual desks. Activity areas help children learn more efficiently by having personal contact with the materials present there and it also helps them developtheir behavior. Every classroom can have 15 to 20 activity areas and those activity areasshould have some defined characteristic i.e. having well-defined boundaries, enough space for each activity, proper working and sitting area and have visually appealing objects according to pre-school children (Olds, 2001). Some of the commonly held activities in pre-schools are related to arts, science, computer, mathematics, dramatization and multiuse stations. The activity areas of classroom are suggested to be divided into three zones such as quite zone, messy zone and active zone. The quite zone has activities related to mathematics, science, reading and writing. The messy zonehas activities involving sand, paper, water and clay whereas the active zone involves activities related to dramatization and music. All of these activity areas have certain rules and boundaries to follow for children (Olds, 2001). In the present time, the traditional place for communication between teachers and children has seen to movingtowards large group meeting places where they can interact with each other apart fromformal learning and eating.

Children need such places inside and outside of school to get to interact with each other. Such areas need to have suitable environment which makes them feel welcomed and also give them a feeling of belongingness.

Need for these areas in pre-schools also depend on the geographical location ofthem. In schools located in the urban areas, people love to have more privacy and avoidcrowd whereas in rural areas people love having more people around. More social interaction is encouraged in open areas between children because they feel more comfortable having interpersonal communication with someone there.

2.2.4.1 Density

Density is defined as number of children per square feet of a classroom. According to Moore, there should be 60 to 75 children per facility in preschools and out of these children there should be no more than 16 children in a single classroom having two adults with them. On having low density of children in classroom, it tends to have a positive impact on them. In various researcher conducted it has been found out that classrooms with low density encourages class participation and low behavioral issues (Batchford, Kutnick & Martin, 2001; Maxwell, 2003). Low density classrooms are helpful for children of pre-schools. Maxwell suggested that in classrooms where there is less number of children, they show strong academic performance as compared to those having high density. Moreover, the teachers are able to give more individual attention to children if there is low density of children in class (Batchford et al., 2001).It was suggested by a researcher that there should have ten children per adult in preschools in order to manage them growing learning needs. Also, the groups made at this level should not be more than two to four to work together (Kemple, 2004).

In contrary to the classrooms having low density, children will lack concentration, poor performance, increases conflict, decreases individual participationand positive interaction between children. Crowdedness at pre-school level poses a negative impact on a child

personality (Bailey, 2002) and this will lead them towards isolation. When the number of children in a classroom of 25fts increases to more than 15, it will make difficulty for them to interact with each other and perform better to develop themselves (Kemple, 2004). Moreover, it also causes aggression and weak relationship with peers in their classroom. The issue of having density has found to be having much negative impact on boys as compared to girls (Maxwell, 2003). For each preschooler, the space provided to them should be no less than 5 meter per square. Thisarea does not include the service area, entrance areas, hallways and other required areas by a child (Child Care Division Ministry of Community Development, 2011).

2.2.4.2 Temperature and air quality

Numbers of physical aspects of environment such as heating, lightening and acoustics have a significant impact on the individuals spending time in there. Such elements havea visible impact on the learning abilities of preschool children (Fisher, 2001). Temperature, heat and quality of air are considered as the most important element by researchers as it impacts the children behavior and their academic outcome (Earthman,2004; Fisher, 2001 and Schneider, 2002). Temperature, ventilation and heating systemwithin a classroom is found to be strong contributing factor in the noise level of it (Sheild & Dockrell, 2004). In some cases, the level of noise is considered too high disrupting the activities of children studying there and thus the need to felt theprioritization on certain factor is felt.

Lungs of children are not fully developed even by the age of 6, thus are more susceptible to air prone lungs diseases (Schwartz, 2004). It is required for teachers andparents to look into the air quality and temperature conditions of pre-schools as well asclassrooms. Indoor activities should be encouraged in the schools where air quality is not good because of the surrounding areas (Arizona Department of Environmental Quality, 2006).

Pre-schools air quality is of major concern because of the age and work routineof children there. They are young enough to get affected by poor air quality than adultsand since they

work and spend more time together, they are more susceptible to infectious diseases. This will not only affect their health but also the education qualityof them (Kennedy, 2001).

2.2.4.3 Color and lighting

Colors and texture have a very strong impact on the cognitive skills and behavior of their children. Colors create a far-reaching impact on an individual mind. Light colors are considered soothing and relaxing whereas dark colors are considered to be warm and exciting for a human. For this reason, excessive usage of dark colors should be avoided at pre-school level because it will give rise to over-excited behavior in children.The usage of various colors is made through toys, activity areas specifying specific activity and artwork (Maxwell & Evans, 2002). Bright colors are posed to be having positive impact on children and dark colors are observed to be causing negative impact.It was found out that the color of room really affects the energy of pre-school children.When they were in rooms of bright colors like pink they are observed having a much positive energy and behavior whereas when they were shifted to rooms with grey colors,their energy level decreases. Moreover, it was also observed that children will paint more positivity while negative in rooms of color blue and greys etc.

The relationship between the environmental colors and children mood is quite unclear. However, in some researches, primary colors like yellow and pink are considered stimulating to children as at this age they are responsive to such colors. Onthe other hand, colors like blue, green and red are taken as calming to them (Stone, 2001). A school should be a place for preschoolers which are fun learning for them, which makes them learn new things and creates exposure about their surroundings.

Right choice of color should be made at the right place to neither divert their attention nor making them feel low. In classrooms, color should be chosen which are not too bright to divert the attention of children from learning activities.

Just as colors, lighting serves the same value for children in their learning process for which a considerable amount of attention should be given to them. Lightingshould be given utmost importance from the preschool level as it will help the childrenbuild their aesthetics and psychological characters strongly.

2.2.4.4 Noise

Noise is a prominent factor which impacts a child's mood and the overall environmentof classroom significantly (Lundquist et al., 2002). The noise in the classroom been caused has been divided into two categories i.e. the external and the internal noise. Theexternal is caused because of airplanes, traffic and other external activities whereas theinternal noise has been created because of the activities happening within the classroomby teachers and children themselves.

Significant level of background noise in preschools has been a huge problem which needs to be look after. The issue has been tried to resolve by reducing the number of children in each group. This number has been reduced to 3or 4 to 6 or 7 children to reduce the level of noise as well as to increase the performance of children (Sodersten et al., 2004). Researcher, Maxwell and Evans (2000), in their study have found out a relationship between children reading skills and acoustics. They stated that classroom where the level of noise is high; the children studying in there have poor reading skills. They have poor understanding and learning of language. For this reason, child care centers and pre-schools should be made away from noisy areas such as railways tracks,airports, highways and industrial areas. The basic effort in noise reduction can be made while constructing, planning and designing of new buildings and classrooms. Proper selection of areas for preschoolsand day care centers has been made. Further, the classes should be allocated in the building which is at distance from

play areas and cafeterias (Geller et al., 2007).

2.2.4.5 Seating position

Seating arrangement tells a lot about a child interest towards learning. From the experience of students and teachers it has been found that students who are more interested in learning want to sit close to teacher whereas students who are not interestedin the learning process always sit as close to the door as possible. According to a study,children who like to sit close to teachers and their friends tend to have strong feeling ofaffiliation and higher sensitivity towards criticism while children who sit close to dooror window have negative attitude towards learning and their capacity of success. Similarly, in another research, self-esteem is also considered as a contributing factor inchildren interest in classroom. Children with higher self-esteem try to sit close to teacher and share more of their thoughts with other as compared to those with low self-esteem.

The distance between teacher or instructor and children also has a relation with the performance. Children who sit close to teachers and have low distance from them tend to perform well in their academic matter than those who have greater distance fromteachers. In a study conducted on children of Kindergarten till 5th grade that those whoare positioned to sit in the front row of classroom are more active, interactive and sharetheir thoughts with their friends and teachers. In some researches, children sitting in themiddle of classroom are also found to be more active and receiving good grades. So, acontradiction has been found in researches regarding the effect of seating arrangementon the performance and interaction level of children. However, it has been observed from all the researches that children seated on the front rows and middle of the classroom is tending to have good performance than the back benchers.

2.2.4.6 Classroom design and furniture arrangement

Just like seating arrangement impacts the behavior and academic performance of children in classrooms, similarly, the availability and arrangement of various materials and equipment is also of great importance. In a study on the pre-schools of Los Angeles, he found that the arrangement and placement of various materials and equipment is different in each school. He stated the availability and organization of them as factor in determining the quality of each day-care center. He further stated that as the quality of physical space decreases it increases the level of teacher restriction and control over children, increases conflict level between children and reduces the level of children interests in learning activities. In Zifferblatt study, he made a relationship between the behavior and class design considering the factors like teacher's instruction style, class curriculum and related activities. He found that the attention span of students is very small because of having free non-task movement and loud conversation in the class. He also stated that another reason was the class deign in which children were working in a group of two to three member but their distance was too much from the instructor making them give enough privacy to get distracted from the activity assigned to them.

Number of recommendations and suggestions has been given by researchers in order to increase the effectiveness of classroom environment (DeBruin, 2008; Greenberg & Rodriguez, 2007; Feeney, Christensen & Moravick, 2006; Wellhousen & Crowther, 2004). It has been suggested to make the learning process of children effective; movement between different areas of classrooms should be easy, distractions should be minimized and play opportunities must be increased. The materials and objects available to them should be age appropriate. Disability and language difference should not be a barrier in approaching and usage of an activity area. The objects and materials in the classroom should reflect the acceptance of diversity in there.

The arrangement of seats and other materials in the classroom depends on the philosophy of teacher. Since most of the arrangements and settings are made on the objectives of teacher but still there are few elements and features which are required to be followed in every classroom regardless of teacher's objectives. Example of it can be a teacher who believes that children can learn more and participate actively when involved in group tasks like reading aloud etc. For this reason, she will try to have a very broad library area for children which has variety of literary material, easily assessable to children whenever and whatever they want to.

2.2.4.7 Value and acceptance

Acceptance and valuing diversity in the classroom towards children should be there. It is because when a child feels valued, accepted and important; he starts being more active, engaging and comfortable with his environments and people around. They suggested that teachers can show their acceptance towards diversity by displaying artworks and books from various cultures and languages. Artwork and achievements of children should be highlighted and displayed to make children feel that they are valued and appreciated. Another way of showing acceptance and value is by keeping a consistent level of interaction with all the children. It is because it will make all the children feel that their contribution and saying is important to the instructor.

Talking to a child in their first language is also a sign of showing value and acceptance. So, by using few basic words of a child's language with him will make him feel comfortable while interacting with the teacher and also valued and accepting (Barrera, 2005; Markham & Gordon, 2007; Quinones, 2005).

2.2.4.8 Impact on children's social behavior

A relationship has been founded between children cognitive learning and development and their class activities by researchers who have followed Piaget and Vygotsky theories. Children during their class activities get to explore their imaginative thinking and to enhance

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problem solving abilities. Due to Early Childhood Education, it has been found out that children develop strong readiness in motor skills, language, visuals and social skills before entering the actual formal education level. Environment around a person affects him in various ways and when it comes to children of pre-school age, they get the most because they are in the age of their lives where they get influence from their surroundings. The physical environment at preschool affects them the most. The environment around children in their school and classroom decides the way they respond (Isbell and Exelby, 2001).

At preschool level, children learn things by exploring and interacting with their surrounding for which things forming their environment should be made keeping in mind their level of attraction and excitement (Isbell and Exelby, 2001). It is common to find that physical environment really affects a person behavior and mental health. Similarly, the preschoolers get really influenced by their surrounding and it gets visible from their behavior (Bailey, 2002). A research was conducted on preschool children by making them experience classrooms of different ceiling heights and colors. In different physical spaces, their behavior was found different through their changing behavior. However, a change in the organization of physical materials in the classroom has a positive impact on the behavior of children.

In children behavioral development, the seating arrangement of children with their fellows and the physical environment of class room play a very important role. Number of learning aspects gets covered in the class environment including child relationship with other learners in the class and their teacher. In a classroom, there are number of observable aspects which contributes in shaping the behavior include class physical environment, psychological environment and certain instructional procedures (Miller & Cunningham, 2003). These are the aspects which have direct relation with child motivation level, social interaction and learning behavior in the class. Classroom environment should be made while considering the element of good planning, effective teaching and teacher's concern regarding children welfare in the classroom (Barth et al., 2004). In a study, a researcher indicated that the

physical environment of pre- schools affects children, their teacher/caretakers and their movement, making it difficultfor them to interact with each other. Poor physical environment in the pre-schools classrooms make it difficult for children to move and interact with teacher develop a negative attitude of them towards schooling in future. According to architectural pointof view, classroom design and arrangement should be done in such a way that it motivates children to explore the environment around them. Classrooms are designed in a way keeping in mind the needs of young children. The appearance of classroom distinguishes it from other rooms of the school designed for institutional purposes.

2.3 Review of Related Researches

2.3.1 Early Childhood Education in Pakistan

Since the formation n of Pakistan, governments have been trying their best to get 100%of school-age children to get into schools for primary and secondary education. Early Childhood Education (ECE) has been recognized by NAP as an important sectorof education which needs attention (Government of Pakistan, 2003). The aim of it is tomake this basic level of education assessable to all children of country for their better future. The concept of Early Childhood Education is not new in Pakistan as it was givenquite significant importance in the nineteen seventies. These classes were named as *Katchi* (Pre-primary classes) (Ministry of Education, 2003). Pre-primary classes were arranged for children aged 3 to 6 but the system was later postponed in the 1980s. Children were taught in a very basic and formal way where teacher stands on the boardand make children learn things. In contrary to this, private sector pre-schools and EarlyChildhood Education system, there were complete facilities to the elite class children. The system of *Katchi* classes was arranged properly from 1992 according to National Education Policy. There were still no proper facilities; resources and material availablefor it because of which just a 10% of children aged 3 to 5 were enrolled. By the year 2000, the number of children aged 3 to 5 were in number of 8.61 million which showedthe increased need for ECE in Pakistan. The program of ECE was given importance

and proper facilities in 2003 by National Education Policy (Government of Pakistan, 2003). The budget and resources allocated for ECE was not sufficient to fulfill the needs of 8 million above children of various ages and backgrounds. There were no proper resources available including classroom, teachers, water, and basic materials required for pre-school education was there. The reason of it was mainly poverty, a factor which does not let a nation progress, fulfill the requirements of children and provide them security including education (Ahmed, 2011).

ECE was mainly introduced in 1970s in Pakistan but due to lack of attention and concern caused cessation of it by 1980. Despite of these issues, the teachers continuedthe education of children without considering the need and requirements of their age (Juma, 2004). The system in private sector schools were quite different from government sector schools where system of Montessori schools was followed which fulfills the requirements of elite and middle class children (Hunzai, 2007). According to National Education Policy Review of 2006, there were almost 19million children of age 5 to9 out of which 6 million never got registered for any educational platform. Out of these 13 million, 45% people don't even complete primary education and leave schools. In addition to it, 30% people drop out of school before they even complete their secondary education. A SWOT analysis has been conducted by Syed, Asif and Yousaf (2011) on the current ECE. He stated that improvement is required in the overall curriculum of ECE including the education, training and resources. Moreover, a paradigm shift is required in it. A comparison has been made between the public and private sector schools providing ECE and a major difference has been found in the physical needs provided there to children. No care was taken of children in public sector schools about the physical needs of children including water, seats and basic learning materials (Rehman, 2015).

At Early Childhood Education, children should be provided with anenvironment which helps them to develop and nourish their selves. There are several reasons like proper policy

implementation, fostering, lack of resources, lack of seriousness and most importantly lack of understanding the importance of *Katchi* education has made our ECE low value (Government of Pakistan, 2009). A study conducted on the nine districts of Punjab has stated that ECE is a vital form of educationfor children in their future. Moreover, the teachers play a very important part in it by organizing activities for children regularly, by fulfilling their educational needs and byusing variety of teaching techniques (Ghumman & Khalid, 2016). So, in Pakistan, EarlyChildhood Education has a long way to go to reach the level of quality ECE.

2.3.2 Child Care Quality

Children, worldwide, spend a huge amount of their childhood in child care centers for their early development (UNICEF, 2008). These child care centers should be o good quality as it impacts their development (Belsky et al., 2007). There are various parameters by which the quality of child care centers can be measure but generally therange and quality of materials present there in the educational setting for their development is the one (Zaslow et al., 2011). There is an international agreement present about what are the requirements for proper development of a child in child care(Lamb & Ahnert, 2006).

The elements considered important for quality child care development is thepresence of healthy and safe setting, positive interaction with adults, developmentallearning activities and positive relation with their fellow children (Cryer et al., 2002). Different levels are used to assess the quality of child care around the globe. The widelyused level is the Environment Rating scale which refers to measure the process settingin the early child care setting. Process setting refers to child interaction level and qualitywith its environment i.e. interaction with people around, material and other activities.The assessment of process setting is done through observations and by childrenperformance (Zaslow et al., 2011).

2.3.3 Classroom environment and design

Environment has different definition and importance towards different people. Some people

think it as an ordinary component of our life but for teachers, parents and children it has a significant importance.

Just like a toddler's classroom, a preschooler has the similar needs. The only difference of area in the pre-school and toddler's day care center is not having diapering areas because they are ahead of this need. However, they include some other areas related to art, science, mathematics, music, drama and literature etc.

In designing of classroom or space of young children several aspects of belonging, love, care and security should be kept in mind as it is while making of a house. The architects should establish a classroom environment on consulting the parents and teachers in order to know well about children needs.

An intellectual design of school and classroom can enhance the self-esteem and feeling of belongingness in children. It is because by enhancing self-esteem and feeling of belongingness, children feel free to interact which helps them develop various skills in them. Once the architectural work of school and classroom is completed, it is teacher's and care takers responsibilities to make it attractive and pleasing for children. It is thought as the environment which is visually appealing, attractive and colorful makes children explore their surrounding (Isbell & Raines, 2007).

The environment of classroom is of considerable importance because it is the place where a child spends considerable amount of time in a day. There are four factors highlighted by De Bruin-Parecki, 2008; Greenberg and Rodriguez (2007) which can improve the quality of environment for children.

First factor is creating an environment which is interesting and engaging for children while fulfilling their basic of learning and cognitive development. Second factor is accepting the diversity of children in their opinions and encouraging them to participate. Third element is arranging a number of activities for them time to time to keep them active and the final factor is having a rich language environment in classroom.

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2.3.4 Child friendly environment

Child friendly environment has been defined differently by different authors and researchers but the main idea of all of them was similar. According to one of the researcher, it is defined as "Child friendly environment aims to develop a learning environment in which children are motivated and able to learn. Staff members are friendly and welcoming to children and attend to their health and safety needs." (Young,2002). Learning is a process which continues throughout the life of a human being i.e.from birth till death. A child who has proper physical, mental, emotional, cognitive and intellectual development was tend to be a happier, healthy and productive person of a society than a person who has not.

Mustard (2002) stated that a child who has poor physical, mental, emotional andcognitive development was have poor brain development as grows older. It affects the brain by lowering its cognitive and other learning abilities along with affecting the immune system. For the complete development of all the skills and abilities within a child, it is required for a teacher to build friendly relationship with him/her and this alsodepends on the knowledge and skills of teacher. This shows the importance of teachersin the early childhood education of children. Moreover, it is required for them to keep pace with the latest education trends and strategies in order for them to teach children more effectively.

Classroom cannot be simply taken as a place to learn and polish academic skillsbut is more about developing social relation, bonds, understanding emotions, friendshipand learning cooperation. In this teacher plays a significant role by making childrenknow about the value of them by experiencing it with their friends (Lee, 2006). One ofthe possible ways of maintaining a friendly environment is by making the classroominteresting, sustaining that interest and then extent it. It was make children stayinterested and help them develop friendly bond with their fellow students and teacher. The way a teacher sees the children is very important in forming a child friendly environment. A teacher is required to view his children as strong and competitivehuman rather than weak and needy. It is because it

makes him not to punish them by keeping in mind the affect it was cast on children development. Jamal (2007) stated that physical punishment casts a negative impact on the psychological development of children including self-esteem and confidence and also hinder their cognitive growth. It also leads them to depression, anxiety and aggression which not only harms them but also to the people around them. People who had been exposed to physical punishment in their childhood are prone to have suicidal thoughts (Kaplan, 2006). Teachers and children both play their role in forming a friendly environment but the most important role is of practitioners and teachers who have to make children feel secure and encourages. This was make children have the feeling that they were be encouraged on their performance (Skinner, 2007). Yunus (2003) stated that giving children equal learning opportunities and development was make them all grow in the similar manner regardless of their actual background. The finding of him shows that opportunities are required for children to help them develop into a positive human being.

Children play a vital role in the development of their own intelligence and it is possible if they are provided with the appropriate friendly environment where they can develop their cognitive abilities by being an active participant. It is possible to achieve by giving children the freedom to explore, experiment and learn with the materials present in their surroundings. The materials and equipment present in different areas of their classroom must be handy and easily approachable by them (Sadu, 2004).

2.4 Critical Analyses of Related Researches

In relation to the physical environment of school the availability of adequate materials and suitable play equipment are considered compulsory for the better teaching and learning process, as the environment of the schools is the most essential element of school it must fulfill the requirements of the physical features of their classroom, e.g., shape, lighting, and temperature that affect the work inside the school. Some of the studies suggested that the availability of space both indoor and outdoor spaces matters a lot in the physical environment

of the school as the activities inside the classrooms aswell as outside the classroom need a vital environment for the better performance. Some of the researchers found that since changes in the environment changes the brain, and changes in the environment would consequently change the behavior of thestudents. Thus, changed spaces have the capacity to alter behavior and practice have acknowledged physical environment as part of the learning curriculum with the physical environment of preschools equated to hidden curriculum, built pedagogy and silent curriculum, respectively. So the environment of school included the spatial, visual, acoustic and thermal environment is essential to consider in schools. As physical environment has also been found to significantly affect children's development locallyefforts to improve quality of preschool education can be achieved only if stakeholders are aware of factors promoting better environment.

Shaari and Ahmad (2016) provide a comprehensive summary of physical environment factors supporting children's learning into four main categories, includingfactors concerning manipulation of architectural design features; conducive physical learning environment; as well as factors that support children's play behaviour or learning and enhance children's development. Factors relating to manipulation of architectural design features further include the need to understand spatial planning; aesthetic value; safety features; materials; furniture and finishes; while those concerning conducive physical learning environment includes the need to look into thermal comfort; visual comfort as well as acoustic comfort.

2.5 Summary of Chapter

This chapter conducts the data about the researches that has been conducted in the field of education related to the environment of pre-school classes. There is the data related to previous researches, general background of current study, models of the pre- school environment, and the review of related researches about the current study.

CHAPTER 3

METHODOLOGY AND PROCEDURE

3.1 Introduction

This chapter is conducting information about the research methodology used for this study. This study was designed to compare the environment of different private and public sector schools in Rawalakot at the pre-school level. The nature of this study wasquantitative research. The information collected for this research was done by using a survey method and questionnaire. This chapter also gives the details of the research approach, tool for data collection, procedure, population, sampling techniques, sample selections, research instruments, pilot testing, validation and finalization, delimitation, and the summary ofthe study.

3.2 Research Approach

The research approach used for this study was quantitative. The quantitative research approach involves closed-ended questions. As there was a questionnaire used to collectthe data from the respondents so the quantitative research approach was used for the conducted research. The researcher used a questionnaire checklist and a personal survey to collect data. The survey was conducted in pre-school classes of both public and private sectors for quick evaluation of data.

3.3 Research Design

 This research design used the descriptive comparative research design. Descriptive comparative research refers to the research that describes the characteristics of the giventopic in detail. The descriptive comparative research approach is commonly used in quantitative and qualitative research. A comparative descriptive design is commonly used to describe the variables and to find out the difference in the variables.

3.4 Population

The population for this study was the public and private sector pre-school teachers of Rawalakot. The population for this study included 706 teachers of both public and private sectors. A list of the schools was selected with the help of the Ministry of education Azad Jammu &Kashmir. There were total 453 schools in Rawalakot. Public and Private sector schools from the given list having the pre classes in their schools and the administration of those schools allowed to take data were selected for the collection of data.

Table 3.1

Population of the study from the teachers of public and private sector pre-schools of Rawalakot

Sr. No	Sector	No. of Schools	No of Teachers
01	Public	157	227
02	Private	296	479
	Total	453	706

Table 3.1 shows the total population selected for the collection of data on the Pre-school Environment scale.

3.5 Sampling Technique

For data collection, the researcher used a stratified Random sampling technique for analysis of the school environment at the pre-school level. Simple random sampling is a type of probability sampling in which the researcher randomly selects a subset of the participants from the selected population.

Each member of the population has an equal chance of being selected. Data is then collected from as large a percentage as possible of this random subset. It is useful when case intensive study is required or the area is limited. A software named random number generator was used

to generate the random numbers.

3.6 Sample

The sample of this study was based on the selected population from Rawalakot Azad Jammu and Kashmir. There were total 453 schools in Rawalakot Azad Jammu and Kashmir. There were 700 teachers in both public and private sector schools in Rawalakot. The teachers from both sectors were chosen for the collection of data. There were total of 263 respondents (teachers) as a sample for the collection of data. 94 respondents were from public sector schools of Rawalakot and 169 respondents were from the private sector schools of Rawalakot.

Table 3.2

Sample of the study from the public and private sector pre-schools of Rawalakot

Sr. No	Sector	Total Respondents Teachers	Rate of Return
01	Public	115	94
02	Private	240	169
	Total	355	263 (95%)

Table 3.2 showed that there were total 40 schools twenty from the public sector and twenty from the private sector. The total number of the respondents was 355 pre-schoolteachers from the both sectors. 115 respondents were selected from the public sector and240 respondents were selected from the private sector. The rate of return from the public sector pre-school was 94 and the rate of return from the private sector pre-school was 169 out of 240. The total percentage of rate of return from both public and private sector pre-schools was 95%.

3.7 Research Instrument

The researcher used the Pre-school environment scale (PSES). The research instrumentwas adapted and based on a five-point Likert Scale. All items were close-ended.There were four sub-variables in the instrument written below

1.   Spatial environment

2.   Visual environment

3.   Acoustic environment

4.   Thermal environment.

The pre-school environment scale (PSES) had a total of 43 items. The spatial environment had 12 items, the visual environment had 12 items, the acoustic environment had 12 items respectively and the thermal environment had 8 items.

In this instrument, one checklist for researcher and one checklist was used for teachers for data collection (See appendix H). The checklist was made for the objective no 2 for the comparison ofphysical environment of school included spatial, visual, Acoustic and thermal environment of the classrooms. The checklist for teachers had 29 items and the checklist for researcher had 14items. In the physical survey, the researcher was gathering data about the availability of the facilitieswithin classrooms, their quality, how frequently they were used, and their visual impact on children studying there.

During the personal survey, the researcher was observing the behavior of children, their interaction with physical objects, and the overall environment of the classroom.

Table 3.3

Items included in pre-school environment scale (PSES) (n=60)

Variables	Sub variables	Items no
Pre-school Environment Scale	Spatial Environment	1,2,3,4,5,6,7,8,9,10,11,12
	Visual Environment	13,14,15,16,17,18,19,20,21,22,23
	Acoustic Environment	24,25,26,27,28,29,30,31,32,33,34,35
	Thermal Environment	36,37,38,39,40,41,42,43
Checklist		1,2,3,4,5,6,7,8,9,10……29
Checklist for researcher		1,2,3,4,5,6,7,8,9,10……19

3.8 Verification of Research Tool

The research tool was adapted by the researcher and was given to four experts fromthe field of education. Three copies of the Pre-school Environment scale (PSES) were given to three expertise of the National University of Modern Languages Islamabad andone copy was given to the external from the Arid Agriculture University Islamabad. Acover letter, validation certificate, and a copy of the synopsis were given to the expert for validation. Expertise suggested minor changes in the tool and the observations wererefined under the supervision of respected teachers. After the correction of all the observations, the certificates were received from the experts.

3.9 Data collection

The process of data collection was started by selecting the names of the pre-schools from the list of schools provided by the provisional ministry of education AJK (Azad Jammu & Kashmir). Along with the selection of the school, a suitable time was selectedfor easy access to the classroom and teaching staff. The data was collected by using a questionnaire and checklist for the teachers using the information about the classroom and a personal survey was also conducted by the researcher for the quick evaluation ofthe classrooms about the availability of facilities in the classes and schools.

3.10 Tool Construction

3.10.1 Reliability of Research Tool

Table 3.4

Reliability of Preschool Environment Scale Pilot Test (n=60)

Sr. No	Scale	Section	Items	Cronbach's Alpha Reliability
1	**Preschool Environment Scale**		43	.834
1.a		Physical Environment	12	.825
1.b		Visual Environment	11	.788
1.c		Acoustic Environment	12	.768
1.d		Thermal Environment	08	.821

Table 3.4 demonstrates that the reliability of physical environment at pre-school level was recorded as .834. This tool had total number of 43 items in the questionnaire andhad 29 items in the checklist. The main variable of the research topic "Physical environment of pre- school" was further distributed in four sub variables. Those four sections of physical environment at

pre-school level were named as physical environment, Visual environment, Acoustic environment and Thermal environment.

Each sub-section of main section was having different numbers of items in theirsection. The first variable physical section was tested by reliability scale and the highest recorded value was at .825. The second variable was recorded at the value of .821. The third variable was recorded at the value of.788, and the last variable was recorded at the least value of reliability .768.

3.10.2 Item Total Correlation Scale

Table 3.5

Item total Correlation Preschool Environment Scale Pilot Test (n=60)

Item	Correlation	Item	Correlation
PE1	.634**	VE11	.924**
PE2	.481**	AE1	.794**
PE3	.462**	AE2	.883**
PE4	.703**	AE3	.890**
PE5	.750**	AE4	.889**
PE6	.786**	AE5	.894**
PE7	.667****	AE6	.750**
PE8	.854**	AE7	.863**
PE9	.613**	AE8	.860**
PE10	.498**	AE9	.877**
PE11	.247	AE10	.880**

PE12	.771**	AE11	.896**
VE1	.946**	AE12	.904**
VE2	.808**	TE1	.704**
VE3	.780**	TE2	.773**
VE4	.876**	TE3	.813**
VE5	.869**	TE4	.616**
VE6	.901**	TE5	.604**
VE7	.883**	TE6	.932**
VE8	.635**	TE7	.900**
VE9	.882**	TE8	.901**
VE10	.919**		

Table 3.5 demonstrates the correlation of the total items on the given research instrument "Physical environment of pre-school". This table shows most items obtained values are between .946** to 481** which is > Critical value of 0.312** and is a highly significant correlation so these are valid items. Only the item PE11 demonstrates the lowestvalue at .247** which is < than 0.312 ** and is not a significant correlation so this item isnot valid.

Table 3.6

Inter-section wise correlation Preschool Environment Scale Pilot Test (n=60)

Section	Physical Environment	Visual Environment	Acoustic Environment	Thermal Environment	PSES
Physical Environment	1				
Visual Environment	.806**	1			
Acoustic Environment	.742**	.858**	1		
Thermal Environment	.743**	.947**	.926**	1	
PSES	.866**	.961**	.952**	.966**	1

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

Table 3.6 demonstrates the Inter-section wise correlation of pre-school environment of school. The Inter-section wise correlation was recorded at highest value of .966** and the lowest recorded value was .806**. It finally demonstrates the significance of correlation at the 0.01 level.

3.11 Finalization of Pre-School Environment Scale

The school Environment scale was developed on the topic "Comparative Analysis of School Environment at Pre-school level". The instrument for this study was adapted. There were three sections in the questionnaire and one section in the observation (checklist for the researcher). The firstsection was about the demographic information of the respondents conducted general information on age, Academic qualification, teaching experience, school status, and Pre- primary teacher training diploma/certificate. The second section was conducting the questions about the four variables of the main topic Physical Environment, Visual Environment. Acoustic Environment and Thermal Environment.

There were twelve questions in the first variable (Spatial Environment), Eleven questionsin variable two (Visual Environment), twelve questions in variable three (Acoustic Environment), and eight questions in variable four (Thermal Environment). The third section of the scale was about the checklist having 29 items. The part of observation was developed for the researcher to directly observe the classroom environment during the personal survey.

Table 3.7

Objectives of the study

Sr. No	Objectives	Hypothesis	Test
1	To assess the availability of space and facilities which constitute the school environment in physical terms at pre-schoollevel in public and private sector Rawalakot.		Mean test
2	To compare the school environment in terms of physical environment at pre-schoollevel in public and private sector schools ofRawalakot.	There is no significant difference in physical environment of pre-school level in public and private sectors of Rawalakot.	T-test
2(a)	To compare the spatial environment at pre-school level in Public and private sector schools of Rawalakot.	There is no significance difference in the spatial environment at pre-school level in public and private sectors of Rawalakot	T-test

2(b)	To compare the visual environment at pre- school level in Public and private sector schools of Rawalakot.	There is no significant difference in the visual environment at pre-school level in public and private sectors of Rawalakot	T-test
2(c)	To compare the Acoustic environment at pre-school level in Public and private sector schools of Rawalakot.	There is no significant difference in the acoustic environment at pre-school level in public and private sectors of Rawalakot.	T-test
2(d)	To compare the Thermal environment at pre-school level in Public and private sector schools of Rawalakot.	There is no significant difference in the thermal environment at pre-school level in public and private sectors of Rawalakot.	T-test

3.12 Summary

This chapter was conducting the content including the research methodology which involves information about the research method, research tools, populations, data collection, sample collection, sample techniques, data analysis, and delimitations.

The random selection technique was used for the study and the questionnaire was distributed to the participants in the private and public sector schools of Rawalakot. The researcher was also there for the direct observation of the classroom. Data was collected by using a survey method and observations.

CHAPTER 4

ANALYSIS AND INTERPRETATION OF THE DATA

4.1 Space and Availability of Facilities

SECTION I

Objective No. 1

To assess the space and availability of facilities which constitute the school environment in physical terms at pre-school level in public and private sector schools of Rawalakot.

Table 4.1

Availability of facilities in Preschool Environment Scale without checklist (n=263)

Sr. No	Indicators	Sub Indicators	n	Mean	Mean of Mean	SD Deviation	Status
1	**Preschool Environment Scale**		263	157.02	3.65	46.78	Agree
1a		Spatial Environment	263	39.01	3.25	10.12	Neutral
1b		Visual Environment	263	40.77	3.70	13.64	Agree
1c		Acoustic Environment	263	46.86	3.90	16.82	Agree
1d		Thermal Environment	263	30.37	3.79	9.13	Agree

Table 4.1 shows the mean value of the availability of the facilities on the pre-school environment scale. There were a total of 263 respondents. The Acoustic environment of the pre-school environment scale shows the highest value which was 3.90 and most of the respondents were agreed with it, it means that the audio requirements like the teacher's voice was audible to all the students in the classroom and there was no internal or external noise in the classroom and the classrooms were controlled by the teachers. The second-highest value was recorded from the Thermal environment which was 3.79 having most of the responses agree on the statement which shows that the required temperature in the classroom was according to the need of time, and the students were comfortable in their classrooms. The results of visual environment were shown as 3.70 with agree responses, which shows that the availability of facilities included light, in the classrooms, the colored walls, the charts in the classrooms and the well-equipped classrooms were found in the pre-schools of Rawalakot. The overall pre-school environment scale had shown the value at 3.65 and the lowest value of the scale was recorded from the spatial environment at 3.25 which shows that the classrooms were managed, setting arrangement was good and the space for moving around was available. And the results were considered Neutral after the responses of the respondents.

Table 4.2

Availability *of facilities in Preschool Environment Scale with checklist (n=263)*

Sr. No	Indicators	Sub Indicators	N	Mean	Mean of Mean	SD Deviation	Status
1	**Pre-school Environment Scale**		263	52.44	0.60	8.81	Agree
1		Spatial Environment	263	39.01	3.25	10.12	Agree
		Visual Environment	263	40.77	3.70	13.64	Agree
1c		Acoustic Environment	263	46.86	3.90	16.82	Agree
1d		Thermal Environment	263	30.37	3.79	9.13	Agree

Table 4.2 demonstrates the mean value of the availability of the facilities on the pre-school environment scale. There were total of 263 respondents. The checklist for the quick responses with YES or NO options filled by the teachers was recorded with the highest value of 4.87, and the maximum results were agreed upon. The Acoustic environment of pre-school environment scale shows the value which was 3.90 and most of the respondents respond in YES, the value was recorded from Thermal environment which was 3.79 having most of the

responses in YES on a statement. The results of thevisual environment were shown as 3.70 with YES responses, and the lowest value of the scale was recorded from the spatial environment at 3.25 which was considered neutral afterthe responses of the respondents. The overall result of the pre-school environment scalewas 3.060 which show that the responses of respondents (TEACHERS) were satisfied.

4.2 Comparison of School Environment

SECTION II

Objective No.2

To compare the school environment in terms of physical environment at pre-schoollevel in public and private sector schools of Rawalakot.

Ho1: **There is no significant difference in physical environment of public andprivate sector at pre-school level in Rawalakot.**

Table 4.3

Comparison of the school environment in terms of physical environment at pre-school (n=263)

Variable	Group	N	Mean	T	df	Sig
Pre-School	Public	94	139.61	3.68	261	.000
environment	Private	169	163.09			

Table 4.3 presented the comparison of the preschool environment in public and private schools in Rawalakot. The results showed that the mean score value for the public sector is 139.61and the private sector is 163.09 which is higher than the public sector. The t value is recorded at 3.68 which is significant at .000. So the null hypothesis "There is no significant difference in the Physical environment at a pre-school level in public and private sectors of Rawalakot" was rejected.

Objective 2.1: To compare the spatial environment at pre-school level in publicand private sector schools of Rawalakot.

Ho1a: There is no significant difference in the spatial environment of public and private sector at pre-school level in Rawalakot.

Table 4.4

Compare the spatial environment at pre-school level in public and private sector schools (n=263)

Variable	Groups	N	Mean	*T*	df	Sig
Spatial	Public	94	36.05	3.02	261	.003
Environment	Private	169	40.04			

Table 4.4 presented the comparison of the preschool environment in public and private sector schools of Rawalakot. The results showed that the mean score value for the public sector is 36.05 and the private sector is 40.04 which is higher than the public sector. The tvalue is recorded at 3.02 which is significant at .003. So the null hypothesis "There is no significant difference in the spatial environment at a pre-school level in public and privatesectors of Rawa2lakot" was rejected.

Objective 2.2: To compare the visual environment at pre-school level in Public and private sector schools of Rawalakot.

Ho1b: There is no significant difference in the visual environment of public and private sector at pre-school level in Rawalakot.

Table 4.5

Comparison of visual environment at pre-school level in public and private sector schools(n=263)

Variable	Group	N	Mean	*t*	df	Sig
Visual	Public	94	34.91	4.45	261	.000
Environment:	Private	169	33.81			

Table 4.5 showed the comparison of the visual environment at a preschool level in public and private sector schools of Rawalakot. The results showed that the mean score value for the public sector is 34.91and the private sector is 33.81 which is lower than the public sector. The t value is recorded 4.45which is significant at .000. So the null hypothesis "There is no significant difference in the visual environment at a pre-school level in public and private sectors of Rawalakot" was rejected.

Objective 2.3: To compare the Acoustic environment at pre-school level in Public and private sector schools of Rawalakot.

Ho1c: There is no significant difference in the acoustic environment of public and private sector at pre-school level in Rawalakot.

Table 4.6

Comparison of the acoustic environment at pre-school level in public andprivate sector schools (n=263)

Variable	Group	N	Mean	t	df	Sig
Acoustic	Public	94	42.25	2.66	261	.009
Environment		169	48.47			
	Private					

Table 4.6 demonstrated the comparison of the acoustic environment at preschool in public and private sector schools of Rawalakot. The results showed that the mean score value for the public sector is 42.25 and the private sector is 48.47which is higher than the public sector. The t value is recorded as 2.66 which is significant at .009. So the null hypothesis "There is no significant difference in the acoustic environment at a pre-school level in public and private sectors of Rawalakot" was rejected.

Objective 2.4: To compare the Thermal environment at pre-school level inpublic and private sector schools of Rawalakot.

Ho1d: There is no significant difference in the thermal environment of public and private sector at pre-school level in Rawalakot.

Table 4.7

Comparison of the Thermal environment at pre-school level in public and private sector schools (n=263)

Variable	Group	N	Mean	*T*	df	Sig
Thermal	Public	94	26.39	4.11	261	.000
Environment						
	Private	169	31.76			

Table 4.7 demonstrated the comparison of the thermal environment at preschool in public and private sector schools of Rawalakot. The results showed that the mean score value for the public sector is 26.39 and the private sector is 31.76 which is higher than the public sector. The t value is recorded as 4.11 with a significant value of .000. So the null hypothesis "There is no significant difference in the thermal environment at a pre-school level in public and private sectors of Rawalakot" was rejected.

4.3 Check List for Teachers

SECTION III

4.3.1 Availability of Physical School Environment

Objective 2: To compare the school environment in terms of physical environmentat pre-school level in public and private sector schools of Rawalakot.

Table 4.8

Frequencies of "Availability of physical environment facilities at pre-school level in public and private sector schools of Rawalakot" (n=263)

Sr. No.	Availability of Physical Facilities	Yes 1		No 2	
		N	%	N	%
1	A separate classroom.	250	95.1	13	4.9
2	Decorated and well Equipped classroom.	249	94.7	14	5.3
3	Productive educational Environment exists.	237	90.1	26	9.9
4	Electric fans.	191	72.6	72	27.4
5	Furniture.	237	90.1	26	9.9
6	Bathroom/Toilets.	252	95.8	11	4.2
7	Boundary walls.	240	91.3	23	8.7
8	Clean drinking water.	252	95.8	11	4.2
9	Transport facilities.	139	52.9	124	47.1
10	First aid facility	237	90.1	26	9.9

Table 4.8 shows the frequencies of the checklist designed for the teachers of pre-school with YES or NO responses. There were ten items in this section containing the statements about the availability of physical facilities at pre-school level. The results from the responses of the teachers showed that the maximum facilities were provided to the teachers of pre-school in classes.

4.3.2 Availability of Teaching & Learning Facilities

Table 4.9

Availability of Teaching & Learning Facilities (n=236)

Sr. No.	Availability of Teaching & LearningFacilities	Yes 1		No 2	
		N	%	N	%
1	Separate teacher	224	85.2	39	14.8
2	Teaching kit	240	91.3	23	8.7
3	Computers	222	84.4	41	15.6
4	Audio-visual aids like chart,maps, and flags.	217	82.5	29	11.0
5	Black board/ white board	240	91.3	23	8.7
6	Colored chalks/ markers	238	90.5	25	9.5
7	Picture card	209	79.5	54	20.5
8	Picture book	209	79.5	54	20.5
9	Alphabetic cards	211	80.2	52	19.8
10	Number games	201	76.4	62	23.6
11	Wooden tiles	249	94.7	14	5.3
12	Material for creative work.	224	85.2	39	14.8
13	Material for dramatic play.	187	71.1	76	28.9

14	Material for reading	151	57.4	112	42.6
15	Material for representation.	132	50.2	131	49.8
16	Material for science discovery.	125	47.5	138	52.5
17	Material for musical instruments.	151	57.4	112	42.6
18	Material for experimentation	130	49.1	133	51.5
19	Material for writing	187	71.1	76	28.9

Table 4.9 shows the frequencies of the checklist designed for the teachers of pre-school with YES or No responses. There were total nineteen statements conducting the information about the availability of the academic facilities included teaching and learningmaterials. The total number of responses after the calculation of frequencies showed that maximum facilities related to the teaching and learning material were provided to the teachers in the pre-school.

4.3.3 Checklist for Researcher (A personal survey by the researcher)

To assess the availability of space, and facilities which constitute the school environment in physical terms at pre-school level in public and private sector pre-schools of Rawalakot.

Table 4.10

Direct observations (A personal survey by researcher) (n=40)

Sr. No.	Availability of Space and facilities	Private sector schools	Public sector schools
1	Separate classrooms	67.5%	33.5 %
2	Boundary Wall	52.5 %	47.5 %
3	Separate playing area	55 %	45 %
4	Separate area for plays orevents	62.5 %	37.5 %
5	Electric fans	75 %	25 %
6	Furniture	55 %	45 %
7	Drinking water	62.5 %	38.5 %
8	First Aid Facilities	82.5%	17.5 %
9	Av. Aids (charts maps, globeetc.)	90 %	10 %
10	Black/ white Board	100 %	100 %
11	Computers	72.5%	27.5 %
12	Colored charts and markers	77.5 %	22.5 %
13	Different colors	70 %	30%
14	Decorated and well equipped Classrooms	80 %	20%

Table no 4.10 demonstrated about the personal survey of researcher in the pre-schools to check the availability of available facilities in the schools. It was shown in the result that maximum numbers of facilities were available in the private sector and less numbers of facilities were available in public sector pre- schools of Rawalakot. Direct observations were held by the researcher to observe the physical environment of the schools personally. From the results of checklist conducted by the researcher during the personal survey of pre-schools of Rawalakot shows that there was the lack of Separate classrooms, boundary walls, separate playing areas, Av Aids and computers in public sector pre-schools.

4.4 Summary of Chapter

This chapter demonstrates the statistical analyses of data. There are three sections in this chapter. The section one is about the demographic information of the tool, which included the age, professional qualification, teaching experience school status and public and private sector schools. This section conducts the information about the respondents teaching in pre-schools of public and private sector schools of Rawalakot. Section II was about the statistical analysis of objectives. Mean test was applied on objective1 and it was found from the results that there were the basic facilities provided in both public and private sectorschools. Section III was about the objective two which was done by applying a T- test, in this objective there were four sub variables about the comparison of spatial, visual, acoustic and thermal environment of pre-schools from public and private sector schools

CHAPTER 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSION ANDRECOMMENDATION

5.1 Summary

The research was aimed to explore the environment of preschool in public and private sector pre-schools of Rawalakot. The objectives of the current study were to assess the availability of physical facilities provided in the public and private sector pre-schools of Rawalakot and to compare the school environment in terms of the physical environment ata preschool level in public and private sector schools in Rawalakot. The second objective of the study was further divided into four sub-objectives that were used to compare the spatial environment of the school, the visual environment of the school, the Acoustic environment of the school, and the Thermal environment of the schools at a preschool levelin public and private sector schools of Rawalakot.

The population of the study was based on 263 pre-school teachers from both publicand private sector pre-schools of Rawalakot. There were twenty public and twenty private schools were selected as a sample to get the responses and to collect the data for the research from the selected population. Data was gathered from 64.3% from the private sector and 35.5% from public sector teachers.

A questionnaire named as pre-school environment scale(PSES) was used as a tool for the collection of data from the respondents. There were four indicators used in the scale the spatial environment, visual environment, acoustic environment, and the thermal environment which included different questions with five licked scales. The questions were

Asked about the availability of physical environment facilities provided in the schools to the teachers of the school. The researcher personally visited the schools to gather the information. Data was statistically assessed by Cronbach's Alpha Reliability. The mean and t-test were also applied to the given objectives of the study.

The results of the study after the statistical operations demonstrated that there was a statistically significant difference found in the environment of public and private sector pre-schools of Rawalakot.

5.2 Findings

1. Availability of facilities which constitutes the school environment in physical terms in public and private sector pre-schools of Rawalakot was having the value in the mean of mean as for the pre-school environment scale were m=3.65, mean of mean for Spatial environment was found as m=3.25, the value of the mean for Visual environment was m=3.70, the mean of mean value found in Acoustic environment was at m=3.90 and the Thermal environment was recorded at the value of m=3.79 which shows that the availability of facilities in all the given variables were available as shown by the results of the respondents and the values of the mean after the statistical evaluations. This means that a maximum number of respondents were agreed on the available facilities in the school and the classrooms area. (Table No 4.6)

2. The availability of facilities provided in the public and private sector pre-schools of Rawalakot included the responses from the teachers on the checklist with YES or NO options for the quick evaluation of the physical environment in the school, With the checklist item values, the value from the mean of means in pre-school environment scale was m= 0.60 with the maximum responses of teachers and the

agree on status from the maximum respondents. The value for the spatial environment was recorded in the mean ofmean value was m=3.25 with maximum numbers of agreed status, the value of the mean of mean in the visual environment was recorded at m=3.70 having the maximum responsesin Yes form, the recorded value after the mean of means the Acoustic environment was atm=3.90 recorded value with maximum agreed statuses, the value of the mean of mean in the thermal environment was recorded at m=3.79 and the value of checklist in the mean ofmean was recorded at the highest rate as m=4.87 which demonstrated the agreed status of maximum respondents for the availabilities of the facilities provided in the boundaries of the school. (Table No 4.7)

3. The comparison of the school environment in terms of the physical environment at a pre-school level in public and private sector schools of Rawalakot. In a comparison of theschool environment, the value of t was found as 3.68 in the public sector. The value of mean from the private sector teacher at pre-schools was recorded as 163.09 and the value of mean was recorded as 139.61 from the public sector pre-schools of Rawalakot. The hypothesis "There is no significant difference in comparison of the physical environment of public and private sector pre-school" was rejected (Table No 4.8).

4. The comparison of the school environment in terms of spatial environment was recordedwith the value of t=3.02 with a significant value of .003. The value of the mean in this comparison was recorded as m=36.05 in public sector pre-schools and m=40.04 in privatesector pre-schools of Rawalakot. So the hypothesis "There is no significant difference in the spatial environment at a pre-school level in public and private sector schools of Rawalakot" was rejected (Table No 4.9).

5. For the comparison of the school environment in terms of the visual environment in public and private sector pre-schools of Rawalakot t-test was applied to the data, the value of t was found in this comparison t=4.45 with a significant value of .000 and the value of mean was m=34.91 in public sector schools in the value of m=33.81 in private sector pre-schools. From the results of this objective, it was found that the hypothesis "There is no significant difference in the visual environment at a pre-school level in public and private sector schools of Rawalakot was rejected. (Table No4.10)

6. The comparison of the Acoustic environment at a pre-school level in public and private sector schools of Rawalakot was recorded with the t value of t=2.66 with a significant value of .009. the value of mean was recorded in public sector pre-schools was 42.25 and the value of mean was recorded in private sector pre-schools was m=48.47. From the conducted test on the objective, it was found that the hypothesis for this objective "There is no significant difference in the acoustic environment at a pre-school level in public and private sector schools "was accepted. (Table No 4.11)

7. The comparison of Thermal environment in public and private sector pre-schools was found with the t value t=4.11 and the value of mean was recorded as m=26.39 in public sector pre-schools and m=31.76 was recorded in private sector pre-schools of Rawalakot. The value of significance was recorded at .000 thus the results show that the hypothesis "There is no significant difference in the acoustic environment at a pre-school level in public and private sector schools" was rejected (Table No 4.12).

8. The frequencies of availabilities of physical environment facilities at pre-school level in public and private sector pre-schools of Rawalakot. There were ten items in

this section each section having different number of frequency as responded by the teachers.

8.1   Separate classroom: the response of 95.1% respondents was in agreed form and 4.9% respondents were disagreed from the statement.

8.2   Decorated and well equipped classrooms: 94.7% respondents were agreed and 5.3respondents were disagreed.

8.3   Productive educational environment exists: 90.1% respondents were agreed and 9were disagreed by the availabilities of the facilities.

8.4   Electric Fans: 72.6% respondents were agreed with the availabilities of facilities and 27.4% respondents were disagreed with the facilities provided in the school.

8.5   Furniture: 90.1% respondents were agreed and 9.9% were disagreed with the facilities provided in the school.

8.6   Bathroom/ Toilet: 95.1% responses were in agreed status and 4.2% responses werein disagreed status by the availability of facilities provided in the school.

8.7   Boundary walls: the response of 91.3% respondents in Yes response and 8.7% in No response.

8.8   Clean Drinking Water: 95.8% respondents were agreed with the availabilities of facilities and 4.2% were in disagreed status by the availability of facilities providedin the school.

8.9   Transport Facilities: 52.9% respondents were agreed with the availabilities of facilities and 47.1% were disagreed with the facilities provided in the school.

8.10   First Aid facilities: 90.1% respondents were agreed and 9.9% were in

disagreed status by the availability of facilities provided in the school. (Table No 4.13

5.2.1 Availability of Teaching & Learning Facilities

Availability of teaching and learning facilities from the checklist was having 19 items related to the teaching-learning facilities including the following items.

1. **Separate Teachers:** From the obtained results it was found that 85.5% of respondents were agreed with the statement and 14.8% disagreed with the available facilities. Separate teachers were available in both public and private sector pre-schools.

2. **Teaching Kits:** Teaching kits were provided to the teachers in both public and private sectors included board markers, marker ink, duster, drawing charts, color pencils, scotch tapes, and scissors etc. 91.3% of respondents were agreed and 8.7% of respondents disagreed with the statement.

3. **Computers:** In maximum number of private sector pre-schools the separate computer labs were available and students of pre-school classes were known of it and teachers visited them to tell them about computers. In some of the public sector pre-schools the computers were not available. These findings showed that 84.4% of respondents were agreed and 15.6% of respondents disagreed.

4   **Audio-visual aids like charts, maps, and flags:** In public and private sector pre-schools the facilities like charts, maps, and flags were available. From the given questionnaire 82.5% of respondents were agreed with the availability of the facility of Audio-Visual aids, and 11.0% of respondents disagreed with the statement.

5   **Blackboard/whiteboard:** In all schools the white and black boards were available. in some public schools the black boards were in use while in all private sector

schools the white boards were available. The results showed that 91.3% of respondents were agreed with the statement and 8.7% of respondents disagreed with the statement.

6   **Colored chalks/ markers:** colored chalks and markers were available in both public and private sector pre-schools of Rawalakot. 90.5% were agreed with the availability of facilities and 9.5%were disagreed with the statement.

7   **Picture card:** picture cards were available in pre-school level classrooms for the students however in some of the public as well as private schools were not using the picture cards in their classes during teaching and learning process. From the respondents 79.5% were agreed with the availability of the facility and 20.5% disagreed.

8   **Alphabetic cards:** Alphabetic cards were used in the classrooms on the walls as well as on the sides of boards for the learning and the students were asked to drawa picture with the alphabet given to them at game time. 82.2% of respondents were agreed with the statement and 19.8% disagreed with the available facilities.

9   **Number games:** Number games were used by the teachers in the classrooms for learning of the students. In some of the public as well as private sector pre-schools the number games were not used. 76.4% respondents were agreed and 23.6% of respondents disagreed.

10   **Wooden tiles: wooden tiles were** 94.7% were satisfied and 5.3% were not satisfied with the provided facilities.

11   **Material for creative work:** In public and private sector pre-schools there were charts, colored pencils, blocks and different pictures books were available for students to enhance the learning skills of students. 85.2% were agreed that the

material was available in the class and 14.8% were not agreed with the availability of the facility of material in the classroom.

12 **Material for dramatic play:** In some of the schools from the public and private sector play material was available and in some school's students played in the playground in free time. From the respondents 82.2% were agreed and 14.8% were disagreeing.

13 **Material for reading:** Reading material was available in some schools i.e. story books in many schools this facility was not available. 57.4% of respondents were agreed with the availability of reading material in the class and 42.6% were disagreeing.

14 **Material for science discovery:** 47.5% were agreed with the availability of material for science discovery and 52.5% disagreed with the availability of the material for scientific discovery.

15 **Material for musical instruments:** 57.4% were agreed and 42.5% were disagreeing.

16 **Material for experimentation:** 49.1% were agreed and 51.5% were disagreeing.

17 **Writing material:** Writing material was available in the public and private sector pre-schools. Students were also involved to made the little charts in class compititions.71.1% were agreed with the availability of the material for writing and 28.9% were disagreeing with the statement. (Table No 4.14)

5.2.2 Checklist for the Researcher (A personal survey by researcher)

5.2.2.1 Availability of Separate classrooms

The researcher conducted a personal survey to examine the availabilities in the schools for pre-school classrooms and from the conducted evaluation it was found that 87.5% of schools were having different classrooms for each class and their activities while 12.5% were not having separate classrooms. It was found by the personal observation that 12.5% pre-schools that were not having the separate classrooms were the public schools from Rawalakot.

5.2.2.2 Availability of Boundary Wall

47.5% of schools were having the facility of boundary walls in their schools and 42.5% of schools were not having the proper boundary walls around their schools. It was found on the basis of personal observations that there were some of the schools from both public and private sector that were not having the facility of boundary wall around their schools. Boundary walls are considered as an important aspect of the physical environment. The boundary walls are the source of protection for the school zoon.

5.2.2.3 Availability of Separate playing area

Play activities are considered as the most important part of student's learning at this stage. For this purpose, the play grounds for the students in the boundaries of schools are compulsory. It was found from the personal survey that there were 55% of pre-schools in Rawalakot that were having separate areas for playing and there were 45% of schools from both public and private sector schools that were not having the separate playing areas for students.

5.2.2.4 Availability of Separate areas for plays or events

The space for events and plays are compulsory for the schools to perform different events in the school. The auditoriums are known as the event areas for the school events in the schools. It was found from the personal observations that there were 62.5%pre-schools those were having separate areas for the co-curricular activities inside the boundary wall of their school and 37.5% of pre-schools were not having a proper place for the presentation of co-curricular activities in their schools.

5.2.2.5 Availability of Electric fans

School furniture is the first and the most compulsory element for a school setup. It was found from the personal survey that in Rawalakot there were 75% of pre-schools are having the facilities of electric fans in their classrooms and 25% of the pre-schools were not having the facility of fans in their schools.

5.2.2.6 Availability of Furniture

Furniture of the school/classrooms are the essential part of the school. The survey observation found that there were 55% of the pre-schools of Rawalakot were having the proper furniture according to the need of the pre-level classes and 45% of the pre-schools were not having the furniture according to the need of the students. It was also found by the survey that maximum number of public schools was having the lack of furniture in their classes for the pre-school level students.

5.2.2.7 Availability of Drinking water

By the conduct of personal survey of schools of Rawalakot it was found that there were 92.5% of pre-schools in Rawalakot that were having the facility of plan and clean drinking

water for the students and 7.5% of the pre-schools in Rawalakot were not having the facility of clean drinking water for the students.

5.2.2.8 Availability of First Aid Facilities

First Aid facilities are the most important part of the schools for any emergency situations. It was found from the personal survey conduct by the researcher that there were 82.5% of pre-schools in Rawalakot were having the availability of first aid facilities in their schools and 17.5% schools were not having the availability of first aid facilities in their schools.

5.2.2.9 Availability of Av. Aids (charts maps, globe)

Av. Aids are the most important element of now a day's school systems. Charts maps and globs are compulsory in the classrooms for the learning activities. It was found by the personal survey that there were 90% of pre-schools in Rawalakot were having the facilities of AV. Aids in their classes and 10% of the schools of Rawalakot were not having the facilities of AV. Aids in the classes.

5.2.2.10 Availability of Black/ White Board

It was found by the personal survey of the researcher that 100% of all pre-schools in Rawalakot were having the facilities of writing boards in their classrooms and 0% of results were found from the pre-schools not having the boards.

5.2.2.11 Availability of Computers

It was found from the personal survey that there were 72.5% of pre-schools of Rawalakot were having the availability of computers in their schools for students and 27.5% were not having the facility of computers in their schools.

5.2.2.12 Availability of Colored charts and markers

Colored charts, decorated walls with the related elements of the classrooms, colored markers are the required elements of the classrooms for the pre-school level students. A survey conduct by the researcher in Rawalakot found that there were 77.5% of pre-schools were having decorated classrooms with colored charts and markers and 22.5% of pre-schools were not have decorated classrooms.

5.2.2.13 Availability of Different colors

It was found by the survey of Rawalakot pre-school that there were 77.5% of the pre-schools were having the availability of different colors for the students in the classrooms and22.5% of pre-schools were not having the availability of colors in their classes.

5.2.2.14 Availability of Decorated sand well-equipped classrooms

In Rawalakot pre-schools there were 40% of pre-schools that were having well- decorated and well-equipped classrooms and 60% of the pre-schools were not having decorated classrooms. It was found from the observation that the public service pre-schools were not having properly decorated classrooms for pre-school classes. (Table No 4.15).

5.3 Discussion

The study was conducted on a comparative analysis of the school environment at a pre-school level in public and private sector schools of Rawalakot. The study was conducted on the teachers of public and private sector schools of Rawalakot to check the physical environment of the school. The first objective of the study was to assess the availability of physical facilities provided in schools which shows that the maximum number of the respondents(teachers) were agreed with the facilities provided in the preschoolenvironment in the public and private sector pre-schools of Rawalakot. (Table 4.10).

It was found from the study and experience of the researchers that the availability of the best environment in the classroom affects the student's learning. Availability of the things like writing kits and reading books can enhance the overall learning of the students. There should be a well- managed, well- equipped and well- organized, and comfortable classroom for the students to improve their social, mental and physical development. The availability of the best resources for the teaching and learning process has a great effect on the achievement of students. The availability of light, space, seating arrangements, and colors of the classroom is considered the most important physical environmental factors for a school. (Clayton & Fortson, 2017)

The second major objective of the study was to compare the physical environment of school at the pre-school level. It was found from the evaluation of the statistically conducted tests that there was a significant difference in the environment of pre-schools in both public and private sectors of the school. The conducted results show that the physical environment of the schools has a positive effect on the teaching and learning activities as well as the environment of both sectors was quite different in conduction. From the conducted study it was to be found that availabilities of physical facilities such as separate classrooms, boundary walls, playing areas, separate washrooms, decorated classrooms, furniture, clean drinking water, first aid, AV aids, computer, and stationery are needed for any well-equipped schools are the basic needs of students.

The availability of a physical environment in the schools enhanced the students interest in learning, they can behave well in the classroom, improves their listening activities, and express their feeling and the classroom (Vickers & Sandberg, 2016).

The classroom size and density varied, which influences the students and teachers

differently. in term of student density and the measurements of the physical space size, which plays a significant role in their behavior and attitudes. Each classroom in this study accommodate between 21 -26 pupils. Studies showed that a maximum of 20 students in each classroom is appropriate in order to improve student attainment, participation, positive attitude, and greater attention from teachers. Classroom space is considered as an important aspect of learning outcomes the most the students will feel comfortable and easy to move the more they will learn, classroom space is equally important for the teacher to teach more effectively and to keep an eye on all the students by move freely in the classroom. It was concluded from the study that in the congested classroom having a large number of students the teachers and the students feels uncomfortable that affects their teaching learning activities. (Moore and Lackney, 1993)

From the results of this study, it was found that the physical environment of the school included basic things like teaching kits, charts, well-decorated boards, furniture, black and whiteboards, electric fans, furniture, wooden tiles, picture books, alphabetic cards, number games and facilities for the students are necessary for the teachers and the students to teach and learn effectively. The availability of these tools helps the students tolearn more from the visual things available in the classrooms. Educators, psychologists and architects and designers stress that the classroom environment has a power to facilitate and enhance the learning process. Function of the space:

The spatial organization setting enables functions and purpose to be taken into account to use the space properly. In order to help students internalise learning with the pedagogical system or other philosophical approach, the purpose of the classroom and learning environment must be specified and understood well by the teachers and all school

users The well-arranged classrooms with all the available facilities related to the physical environment can improve the mental and physical development of the students. Seating arrangements: Providing flexible seating arrangements enables a diversity of learning activities to take place Teachers can organise the furniture in rows, cooperative groups or clusters, depending on their teaching strategy and the particular function of the space that is required. Proper lights, colors, and personal displays helps to build the visual environment of the classroom more effectively. (Maxwell, 2010).

Acoustic quality in a classroom improves the ability of students' learning. The teacher's voice, for example, has to be audible to all students in the classroom External noises that affect the classroom like airplanes and road traffic must also be kept to a minimum and Internal noises like students' movements and voices are also a significant concern. The thermal quality has an impact on learning; the temperature in learning spacesaffects students' behaviour and achievement Each student has different expectations of anideal thermal environment. High temperatures as well as low ones in classrooms can decrease students' achievement of class tasks (Shield and Dockrell, 2004).

The ideal temperature depends on the climate condition in each country, and student's preferences which also vary; therefore, students and teachers need to be able to control the classroom temperature during class time The provided facilities also help the students to become more active and give their best output in the class as their attention wasbe gained by the things provided in the classroom. (Catron & Allen,2017). The physical environment of the schools also improves the behavior, actions, and feelings of the students.

It was to be found from the results that well-equipped classrooms play a vital role

in students "s learning, as the poor classroom environment can damage the learning abilities of the students as well as it can affect social interaction and make a student inactive.

From the conducted study it was also found that there was a very important role of space of the classroom in the schools for the easy movement of the students and the teachers. The space of the classrooms helps the students to move freely in the classroom and helps the teachers also to perform different activities in the classroom. The space in the classroom helps the students to freely move and to choose the activities of their interest.Which was later helpful for them to be more active and fresh?

It was found from research that the availability of boundary walls is also compulsory in the school environment as the parents bring their child to a safe and secureenvironment as they expect to be safe in the schools for their child. Learning tools and allother material must be used carefully by the teachers of the preschool as everything in the classroom of the preschool learner enhances their abilities and their growth. (Wellhousen,2019).

The availability of proper lights is an important essence in the teaching and learning environment of the classroom, as the proper availability of the light helps them toperform the activities effectively and teachers feel it easy to perform their work properly. There must be the availability of fresh and clean drinking water for the students as well asfor the teachers. In the environment of preschool, the most important thing to be consideredis the playground, it enhances the opportunities for creativity, and it enhances their abilityto enjoy their success and their failure. It was found from the whole research that the availability of the physical environment is important and it affects both the teaching and

learning activities of the teachers and students.

The pre-school level education is a base of the students learning journey there mustbe the environment that help the student to achieve their goals. The administration, the principals, and the teaches are the responsible to build a required environment in the schools for the students. The availability of spatial facilities included size of the room, shapeof the room, location of the doors, location of windows, movement of individual within thespace), the visual environment included colors, lights, charts, etc. facilities included in acoustic environment like noise, both indoor and outdoor noises and the thermal environment included the temperature of the classroom according to the requirement of theclassroom. All these factors must be considered while working to manage the physical environment of the classroom, the administrations, principals, and the teachers must put their efforts to maintain the environment in the school as well as in the classrooms for betterteaching and learning activities.

5.4 Conclusion

From the evaluation of the conducted study, it was concluded that

Objective No 1 "To assess the space and validity of facilities which constitute the school environment in physical terms at a pre-school level in public and private sector schools of Rawalakot" was to assess the availability of the facilities that constitute the school environment in the physical term in pre-school level. From the results of this objective, it was concluded from finding 1 that most of the teachers were agreed with the availability of the physical facilities provided in the school. The majority of the respondents were agreed about the facilities provided in the pre-school classes in terms of the spatial

environment, visual environment, acoustic environment, and thermal environment. The researcher also finds out during the personal survey from the schools that there were basic facilities available in their school and classes.

Objective No 2. Based on findings No 2 obtained from objective number two "Tocompare the school environment in terms of the physical environment at a pre-school levelin public and private sector schools of Rawalakot" was concluded that the physical environment had a negative and non-significant effect on preschool level in public and private sector schools. The researcher concluded from the personal survey that in a maximum number of public schools there was a lack of availability of facilities in terms ofphysical terms such as the availability of ample space for the students, the required and needed sitting arrangements, the decorated classrooms and the availability of separate areasfor plays and most importantly the availability of AV. Aids (Audi Visual Aids) in the schools for pre-school students.

There were sub-variables in objective number two about the variables of the model.Based on finding number 3 objective no (2a) "To compare the spatial environment at a pre-school level in public and private sector schools of Rawalakot", it was concluded thatthe results obtained from the spatial environment had a negative and non-significant effectat a preschool level in schools. The researcher found from the conducted survey in schoolsof Rawalakot that there were most of the public sector schools which there was less numberof facilities were available related to the space in the schools and classes for students to perform any activity during the classes or to perform any play during the break time or in-play class.

Based on finding of objective no (2b) "To compare the Visual environment at a pre-school level in public and private sector schools", it was concluded that there is no difference in the visual environment of public and private sector preschool of Rawalakot.

Based on finding objective no (2c), it was concluded that the results obtained fromthe

Acoustic environment had a positive and significant effect at a pre-school level in schools". The researcher concluded from the personal survey that there was a significant difference in the given objective and the hypothesis was accepted so it was concluded thatthere was a difference in the acoustic environment of public and private sector pre-schoolsof Rawalakot.

Based on finding objective no (2d) "To compare the thermal environment at the pre-school level in public and private sector schools of Rawalakot" it was concluded that the results obtained from the Thermal environment was rejected and had a non-significanteffect on pre-school level in schools.

5.5 Recommendation

The following recommendation has been given on basis of conducted research.

1. The research can also be conducted to explore the relationship between the environment ofthe school and the learning outcomes

2. Higher authorities (i.e. principals and head masters) need to have the awareness about the required environment of the school and provide the facilities in pre-schools including space, separate playing area, well equipped classrooms.

3. Public as well as private sector schools may take services of highly qualified and trained teachers for pre-school level for proper usage of facilities available in their schools.

4. Public sector schools are suggested to upgrade their school environment (space, furniture, playing areas, designed classrooms according to the need of pre-school) for the better learning outcomes.

5.6 Limitations

This study has some limitations

1.   Due to Covid-19 data was collected from the less number of schools as theteachers were not available in some of the schools.

2.   Due to unavailability of sources and condition of covid19 this study was limitedto Rawalakot only.

3.   Due to time constraints and financial limitations, the sample size of the study was small.

Table 5.1

Alignment of objectives, findings, conclusion and recommendation

Sr. No	Objectives	Hypotheses	Finding	Conclusion	Recommendation
1	1. To assess the availability of space and facilities which constitute the school environment in physical terms at the preschool level in public and private sectors of Rawalakot.		It was found from the results obtained from objective number 1 that the maximum numbers of the respondents were agreed by the availability of facilities provided in the public	From the results of objective 1 it was concluded that the maximum number of teachers were agreed with the availability of physical facilities provided in the schools. The	The research can also be conducted to explore the relationship between the environment of the school and the learning outcomes

			and private sector pre-schools of Rawalakot.	researcher also observed during the personal survey and the checklist filled during survey that less number of facilities are available in the public sector schools of Rawalakot.	
2	2.To compare the school environment in terms of the physical environment at a pre-school level in public and private sectors of Rawalakot.	**Ho2:** There is no significant difference in the physical environment of public and private sector at pre-school level in Rawalakot.	It was found from the results obtained from objective number 2 that there is no significant difference in the physical environment of public and private sector pre-schools of	It was concluded that the physical environment had negative and non-significant effects at pre-school level in public and private sector pre-schools of Rawalakot.	Higher authorities (i.e. principals and head masters) need to have the awareness about the required environment of the school and provide the facilities in pre-schools including space, separate playing area, well equipped classrooms.

			Rawalakot is rejected with the value of .003.		
3	2(a) To compare the spatial environment at pre-school level in the public and private sectors of Rawalakot.	**Ho2a:** There is no significant difference in the spatial environment of public and private sector at pre-school level in Rawalakot.	It was founded from the results of objective 2(a) and the hypothesis that the hypothesis there is no significant difference in spatial environment of public and private sector pre-schools of Rawalakot s rejected.	It was concluded from the conducted results that the spatial environment had a negative and non-significant effect on pre-school level. The researcher found from the personal survey that in public sector schools of Rawalakot there was less facilities were available related to spatial	Public as well as private sector schools may take services of highly qualified and trained teachers for pre-school level for proper usage of facilities available in their schools.

			environment.		
4	**2(b)** To compare the visual environment at a pre-school level in the public and private sectors of Rawalakot.	**Ho2b:** There is no significant difference in the visual environment of public and private sector at pre-school level in Rawalakot.	From the results of objective 2(b) the hypothesis there is no significant difference in the visual environment of public and private sector pre-schools of Rawalakot is rejected.	It was concluded from the conducted results that the visual environment had a negative and non-significant effect on pre-school level. The researcher found from the personal survey that in public sector schools of Rawalakot there was less facilities were available related to visual environment.	Public sector schools are suggested to upgrade their school environment (space, furniture, playing areas, designed classrooms according to the need of pre-school) for the better learning outcomes.

5	2(c) To compare the acoustic environment at a pre-school level in the public and private sectors of Rawalakot	**Ho2c:** There is no significant difference in the acoustic environme nt of public and private sector at pre-school level in Rawalakot.	Results obtained from objective 2(c) showed that the hypothesis there is no significant difference in the acoustic environment of public and private sector pre-schools of Rawalakot.	It was concluded from the conducted results that the acoustic environment had a negative and non-significant effect on pre-school level. The researcher found from the personal survey that in public sector schools of Rawalakot there was less facilities were available related to acoustic environment.
6	2(d) To compare the thermal environment	**Ho2d:** There is no significant difference	It was founded from the results of	It was concluded from the conducted results that the thermal

at a pre-school level in public and private sectors of Rawalakot.	in the thermal environme nt of public and private sector at pre-school level in Rawalakot.	objective 2(d) and the hypothesis that the hypothesis there is no significant difference in thermal environment of public and private sector pre- schools of Rawalakot s rejected.	environment had a negative and non- significant effect on pre-school level. The researcher found from the personal survey that in public sector schools of Rawalakot there was less facilities were available related to thermal environment.

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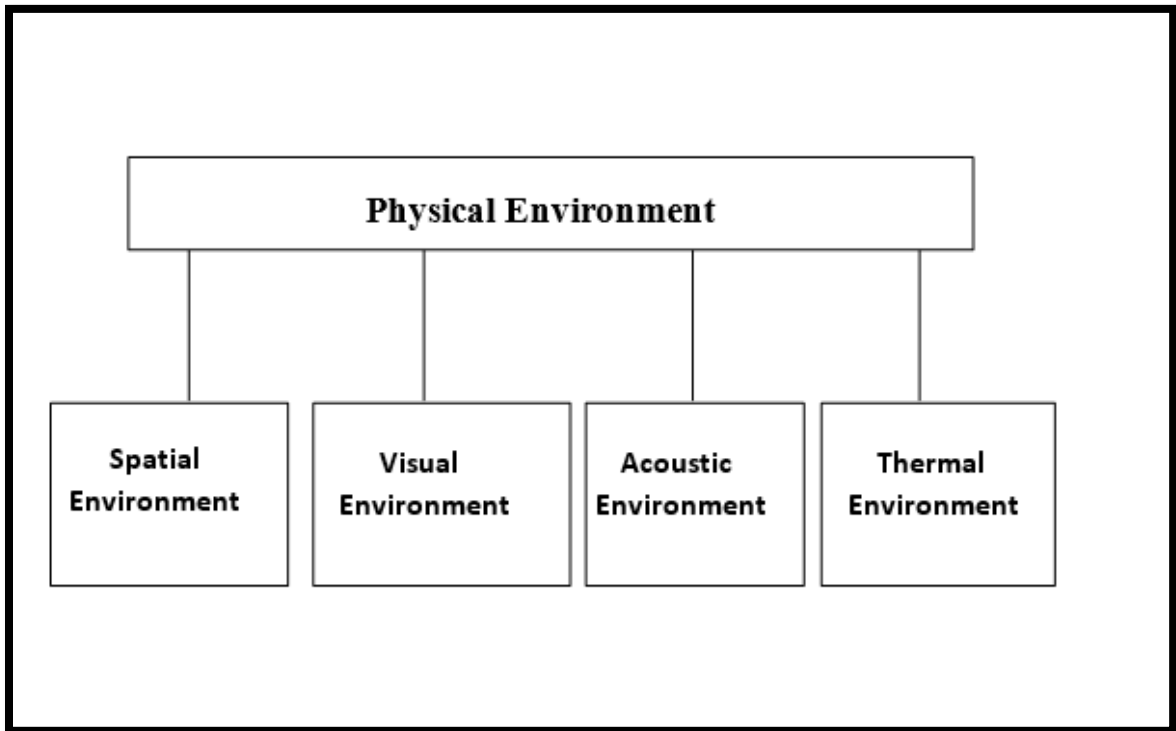
Fig no 1: Theoretical Framework of school Environment by Ali
(2017)

NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF EDUCATION

M.L.1-3/Edu/2021   Dated: 02-07-2021

To: Saba Zahoor,
        1787/MPhil/Edu/F-19

Subject: **APPROVAL OF M.PHIL THESIS TOPIC, AND SUPERVISOR**

1.   Reference to Letter No, M.L.1-3/Edu/2021/, dated 16-02-2021, the Higher Authority has approved the topic and supervisor on the recommendation of Faculty Board of Studies vide its meeting held on 11 February 2021 & Board of Advanced Studies and Research dated 02-05-2021

   a.   **Supervisor's Name & Designation**
        Dr. Farkhanda Tabassum,
        Assistant Professor,
        Department of Education NUML, Islamabad.
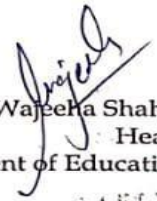
   b.   **Topic of Thesis**
        Comparative Analysis of School Environment at Pre-School Level

2.   You may carry out research on the given topic under the guidance of your Supervisor and Submitted the thesis for further evaluation within the stipulated time. It is to inform you that your thesis should be submitted within described period by **31st July 2022** positively for further necessary action please.

3.   As per policy of NUML, all MPhil/PhD Thesis is to be run on turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis run from own sources.

4.   Thesis is to be prepared strictly on NUML's format that can be taken from Coordinator, Department of Education

Telephone No: 051-9265100-110 Ext: 2090
E-mail: hod-edu@numl.edu.pk

Dr. Wajeeha Shahid
Head,
Department of Education

CC:

        Dr. Farkhanda Tabassum
        Saba Zahoor

2

DEPARTMENT OF EDUCATION
FACULTY OF SOCIAL SCIENCES
National University of Modern Languages
Sector H-9, Islamabad
Tel.No: 051-9265100 Ext: 2090

Dated: 12-11-2021

ML.1-3/2021-Edu
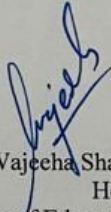
WHOM SO EVER IT MAY CONCERN

Ms. Saba Zahoor D/O Zahoor Ahmed, student of Mphil (Edu) Department of Education National University of Modern Languages Islamabad is engaged in project of Research Work.

She may please be allowed to visit your Institutions to obtain the required information for her Research Work.

This information shall not be divulged to any unauthorized person or agency. It shall be kept confidential.

Dr Wajeeha Shahid
Head,
Department of Education.

Cover Letter for Questionnaire

Comparative Analysis of School Environment at Pre-School Level

Respected Respondents,

I am M.Phil. Scholar (Education) working on my research work on the above mentioned topic, you are requested to contribute your precious time to fill in the questionnaire attached. The first part of the questionnaire consists of demographic information the remaining part of this questionnaire deals with the comparative analysis of school environment at preschool level.

Thank you so much for your cooperation.

Saba Zahoor

M.Phil. (Education) Department of Education

National University of Modern Languages Islamabad

CERTIFICATE OF VALIDITY ANALYES OF SCHOOL ENVIRONMENT

COMPARITIVE ANALYSES OF SCHOOL ENVIRONMENT AT PRE- SCHOOL
LEVEL

By Miss Saba Zahoor

M.Phil Scholar, Department of Education, Faculty of Social Sciences National University
of Modern Languages (NUML), H-9, Islamabad, Pakistan

This is certifying that the questionnaire developed by the scholar towards her thesis has
been assessed by me and I find it to have been designed adequately for analysis of school
environment, based on the comparative analyses of school environment at pre-school level
having four main areas including Spatial environment, Visual environment, Acoustic
environment, and Thermal environment. Responses thus collected will aid treatment of the
subject in a scientific manner. It is considered that the research instrument, developed for
research above-titled,is

according to the objectives and hypothesis of the research, assume adequate construct and
content validity according to the purpose of research, and can be used for data collection
by the researcher with fair amount of confidence.

Name_____

Designation_____

Institute_____

Signature_____

Date_____

Sr. No	List of Experts for Tool validation
1.	Dr. Jameela Ashraf,
2.	Dr. Shazia Zamir
3.	Dr.Aisha
4.	Dr. Sumaira Kiyani

Validation certificate of Research Questionnaire

COMPARATIVE ANALYSIS OF SCHOOL ENVIRONMENT AT PRE-SCHOO LEVEL

By Saba Zahoor Mphil Scholar at Department of Education at National University of Modern Languages Islamabad. It is to be certified that the tool adopted by the Scholar for the Research Topic **"Comparative Analysis of School Environment at Pre-school level."** has been assessed and it is appropriate for the data collection process. All the items in the tool are meeting the objectives and addressing the research questions and research hypotheses.

Face and content validity are also assured , and it may be used by the researcher for the data collection purpose

Validated by: _Dr. Jameela Ashraf_

Signature: _____

Designation: _Assisstant Professor_

Institution: _NUML, Islamabad_

Date of Validation: _12.11.2021_

Validation certificate of Research Questionnaire

COMPARATIVE ANALYSES OF SCHOOL ENVIRONMENT AT PRE-SCHOO LEVEL

By Saba Zahoor Mphil Scholar at Department of Education at National University Of Modern Languages Islamabad. It is to be certified that the tool adopted by the Scholar for the Research Topic **"Comparative Analyses of school Environment at Pre-school level."** has been assessed and it is founded appropriate for the data collection process. All the items in the tool are meeting the objectives and addressing the research questions and research hypotheses.

Face and content validity are also assured , and it may be used by the researcher for the data collection purpose

Validated by: _Dr. Shazia Zamir_
Signature: _Shazia_
Designation: _Assistant Professor_
Institution: _NUML_
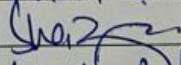Date of Validation: _15-10-21_

Validation certificate of Research Questionnaire

COMPARATIVE ANALYSIS OF SCHOOL ENVIRONMENT AT PRE-SCHOO LEVEL

By Saba Zahoor Mphil Scholar at Department of Education at National University of Modern Languages Islamabad. It is to be certified that the tool adopted by the Scholar for the Research Topic **"Comparative Analysis of School Environment at Pre-school level."** has been assessed and it is appropriate for the data collection process. All the items in the tool are meeting the objectives and addressing the research questions and research hypotheses.

Face and content validity are also assured , and it may be used by the researcher for the data collection purpose

Validated by: _Dr. Aisha_

Signature: _Aisha_

Designation: _AP_

Institution: _Numl_

Date of Validation: _15. 11. 2021_

COMPARATIVE ANALYSES OF SCHOOL ENVIRONMENT AT PRE-SCHOO LEVEL

By Saba Zahoor Mphil Scholar at Department of Education at National University Of Modern Languages Islamabad. It is to be certified that the tool adopted by the Scholar for the Research Topic "Comparative Analyses of school Environment at Pre-school level." has been assessed and it is founded appropriate for the data collection process. All the items in the tool are meeting the objectives and addressing the research questions and research hypotheses.

Face and content validity are also assured , and it may be used by the researcher for the data collection purpose

Validated by: _Sumaira Kiyani_

Signature: _____

Designation: _Lectuer_

Institution: _Pir Meher Ali Shah Arid Agricultural University Rawalpindi_

Date of Validation: _23-10-2021_

List of Schools

Sr. No	School Name	Private	Public
01	Siddique-E-Akber Model school Rawalakot	Private	
02	The National Model school Rawalakot	Private	
03	Islamic and scientific school Rawalakot	Private	
04	Flying Angel Model school Rwalakot	Private	
05	Vision school system Rawalakot	Private	
06	Tameeray No High school Rawalakot	Private	
07	Shah Hamdan Model school Rawalakot	Private	
08	Dabistan Sardar Bhadur Ali khan Khrick	Private	
09	The Educators Rawalakot	Private	
10	Allied school Chak Rawalakot	Private	
11	Grammer Public school Rawalakot		Public
12	Ayub Public school Rawalakot		Public
13	Sunrise Public school Rawalakot		Public
14	Kashmir BeaconHouse Public school		Public
15	Quaid E Azam public school		Public
16	FG public school Rawalakot		Public
17	Pilot Public High school		Public
18	Ideal public school and college		Public

| 19 | Islamia Model school Khrick | Public |
| 20 | Roots public school Khrick | Public |

Comparative Analysis of School Environment at Preschool Level

Respected Respondents,

I am M. Phil scholar (Education) working on my research work on the above-mentioned topic you are requested to contribute your precious time to fill in the questionnaire attached. The first part of the questionnaire consists of demographic information. Thank you so much for your cooperation.

Kiran Ejaz

M.Phil Scholar (Education)

Department of Educational Sciences

National University of Modern Languages,

Islamabad, Pakistan

Please tick any one of the following options:

Age	21-25yrs 1	26-30yrs 2	31-35yrs 3	36yrs + 4
Academic qualifications	FA/FSC 1	BA/BSC 2	MA/MSC 3	Other profession/ degree 4
Teaching experience	1-2yrs 1	3-4yrs 2	5-6yrs 3	7yrs+ 4
Status of School	Public 1		Private 2	
Pre-primary teacher training diploma/ certificate:	Yes 1		No 2	

Preschool environment Scale

Please provide all the demographic information and answer all the questions as best you can on a scale from 1 to 5, with 1 being Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree and 5 Strongly Agree

Thank you for your cooperation.

1. SPATIAL ENVIRONMENT: It includes spatial environment like seating arrangement and area of the classroom							
Code	Sr. No	Statement	SD 1	D 2	N 3	A 4	SA 5
PE1	1	I am satisfied with the classroom size.	1	2	3	4	5
PE2	2	I am satisfied with the space provided in the classroom for teaching learningactivities.	1	2	3	4	5
PE3	3	I have enough space for the seating arrangement in the classroom.	1	2	3	4	5
PE4	4	I am satisfied with the classroom area.	1	2	3	4	5
PE5	5	I have enough space for the art activitiesin the classroom.	1	2	3	4	5
PE6	6	The space provide in the classroom isadequate.	1	2	3	4	5
PE7	7	I have enough space in my classroom forarranging student's desks.	1	2	3	4	5
PE8	8	I have ample space for display of thingsin the classroom (charts).	1	2	3	4	5
PE9	9	There is enough space in the classroom for the arrangement of book cases and shelves	1	2	3	4	5
PE10	10	There is ample space in the classroom forthe students to line up at the end of class.	1	2	3	4	5
PE11	11	My current classroom furniture is fixed in a particular arrangement and the time.	1	2	3	4	5
PE12	12	I think there should be 20-25 student's in my classroom.	1	2	3	4	5

		2. Visual Environment:					
It includes lightening, color of classroom walls and the display of Classroom that made by class teachersor students.

VE1	13	I am satisfied with the quality of myclassroom design.	1	2	3	4	5
VE2	14	I'm satisfied with the facility of electricity of my classroom.	1	2	3	4	5
VE3	15	The current classroom furniture is flexible according to the need ofstudents.	1	2	3	4	5
VE4	16	I'm satisfied with the ventilation of myclassroom.	1	2	3	4	5
VE5	`17	I think colors which are used in myclassroom are appropriate.	1	2	3	4	5
VE6	18	I think light system in the classroommake it easy to perform activities bystudents.	1	2	3	4	5
VE7	19	The display chart in the classroom is helpful for the students to learn effectively.	1	2	3	4	5
VE8	20	I think the walls of classroom should beof different colors.	1	2	3	4	5
VE9	21	I'm satisfied with the wall colors of myclassroom.	1	2	3	4	5
VE 10	22	I think classroom display must be changed after some time.	1	2	3	4	5
VE 11	23	I think classroom display must be colorful and attractive.	1	2	3	4	5

3. Acoustic Environment:

It includes the services from teachers to the students in the classroom as the audible voice of instructor,the control of teacher on noise in classroom both externally and internally.

AE 1	24	I think so the teaching strategies ofteacher affect learning of the students.	1	2	3	4	5

15

AE 2	25	Teachers in preschool must be aware ofnew inventions.	1	2	3	4	5
AE 3	26	I think so the teachers in preschool classroom must be aware of digital working.	1	2	3	4	5
AE 4	27	Teachers for preschool must be specially trained to teach their students.	1	2	3	4	5
AE 5	28	I think the voice of the teacher must beaudible to the all student in the classroom.	1	2	3	4	5
AE 6	29	Teachers must be the responsible tocontrol the voice in the classroom	1	2	3	4	5
AE 7	30	I think so the teacher in the classroom responsible to overcome the noise that comes outside the classroom	1	2	3	4	5
AE 8	31	I think so the teachers are responsible of any kind of disturbance in the classroom.	1	2	3	4	5
AE 9	32	I'm satisfied with learning environment of the classroom.	1	2	3	4	5
AE 10	33	Teacher is responsible to create an appropriate environment in the classroom	1	2	3	4	5
AE 11	34	Teacher must be able to understand all the needs of student's present in the classroom.	1	2	3	4	5
AE 12	35	The language of teacher must be understandable for all the students.	1	2	3	4	5

4. Thermal Environment:

Thermal environment includes the temperature of class.

			1	2	3	4	5
TE 1	**36**	The temperature of my classroom iscomfortable.	1	2	3	4	5
TE 2	**37**	I am satisfied with the air flow of myclassroom.	1	2	3	4	5
TE 3	**38**	I think the temperature of the classroomshould be normal.	1	2	3	4	5
TE 4	**39**	I think providing some mean of avoiding high temperature in warm weather would improve educational attachment.	1	2	3	4	5
TE 5	**40**	I am satisfied with the air capacity of myclassroom.	1	2	3	4	5
TE 6	**41**	I think the temperature of the classroomcan affect the teaching process.	1	2	3	4	5
TE 7	**42**	It is compulsory for both the teacher and student to be comfortable with their classroom environment.	1	2	3	4	5
TE 8	**43**	Teachers are responsible to provide students a satisfactory environment in theclassroom.	1	2	3	4	5

Checklist for Teachers

Are the following physical facilities available for preschool children in school?

		Availability of Physical Facilities		
Code	Sr. No.	Statement	Yes 1	No 2
APF1	1	A separate classroom.	Yes 1	No 2
APF2	2	Decorated and well equipped classroom.	Yes 1	No 2
APF3	3	Productive educational environment exists.	Yes 1	No 2
APF4	4	Electric fans.	Yes 1	No 2
APF5	5	Furniture.	Yes 1	No 2
APF6	6	Bathroom/Toilets.	Yes 1	No 2
APF7	7	Boundary walls.	Yes 1	No 2
APF8	8	Clean drinking water.	Yes 1	No 2
APF9	9	Transport facilities.	Yes 1	No 2
PF10	10	First aid facility	Yes 1	No 2

		Availability of Teaching & Learning Facilities		
TLF1	**11**	Separate teacher	Yes 1	No 2
TLF2	**12**	Teaching kit	Yes 1	No 2
TLF3	**13**	Computers	Yes 1	No 2
TLF4	**14**	Audio-visual aids like chart, maps, and flags.	Yes 1	No 2
TLF5	**15**	Black board/ white board	Yes 1	No 2
TLF6	**16**	Colored chalks/ markers	Yes 1	No 2
TLF7	**17**	Picture card	Yes 1	No 2
TLF8	**18**	Picture book	Yes 1	No 2
TLF9	**19**	Alphabetic cards	Yes 1	No 2
LF10	**20**	Number games	Yes 1	No 2
LF11	**21**	Wooden tiles	Yes 1	No 2
LF12	**22**	Material for creative work.	Yes 1	No 2
LF13	**23**	Material for dramatic play.	Yes 1	No 2

LF14	24	Material for reading	Yes 1	No 2
LF15	25	Material for representation.	Yes 1	No 2
LF16	26	Material for science discovery.	Yes 1	No 2
LF17	27	Material for musical instruments.	Yes 1	No 2
LF18	28	Material for experimentation	Yes 1	No 2
LF19	29	Material for writing	Yes 1	No 2

Thank you for your precious time.

COMPARITIVE ANALYSIS OF SCHOOL ENVIRONMENT AT PRE

SCHOOL

CHECKLIST FOR DIRECT OBSERVATION

1. School Name_____

2. Address of the School _____

3. Status of the School: Public_____Private_____

Availability of Space				
The following physical facilities are available for preschool children in your school.				
Code	**Sr. No**	**STATEMENT**	**YES**	**NO**
AS1	**1**	Separate classrooms	Yes 1	No 2
AS2	**2**	Boundary Wall	Yes 1	No 2
AS3	**3**	Separate playing area	Yes 1	No 2
AS4	**4**	Separate area for plays or events	Yes 1	No 2
Availability of Facilities				
AF1	**5**	Electric fans	Yes 1	No 2
AF2	**6**	Furniture	Yes 1	No 2
AF3	**7**	Drinking water	Yes 1	No 2

AF4	**8**	First Aid Facilities	Yes 1	No 2
AF5	**9**	Av. Aids (charts maps, globe etc.)	Yes 1	No 2
AF6	**10**	Black/ white Board	Yes 1	No 2
AF7	**11**	Computers	Yes 1	No 2
AF8	**12**	Colored charts and markers	Yes 1	No 2
AF9	**13**	Different colors	Yes 1	No 2
AF10	**14**	Decorated and well equipped classroom.	Yes 1	No 2

Demographic Information
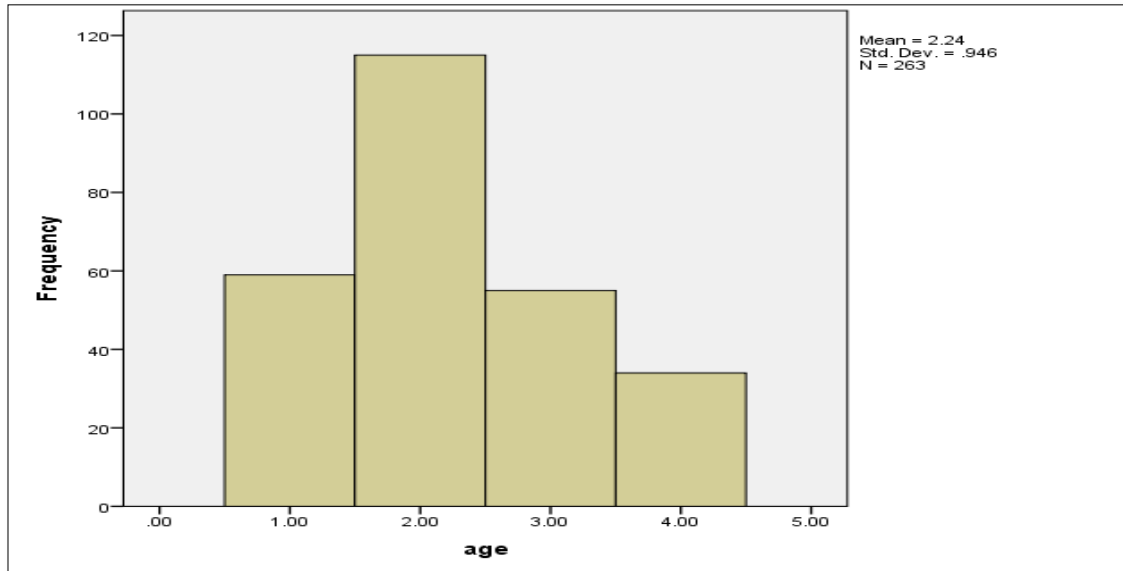
Fig 4.1 Age wise distribution of pre-school teachers in public and private sector schools
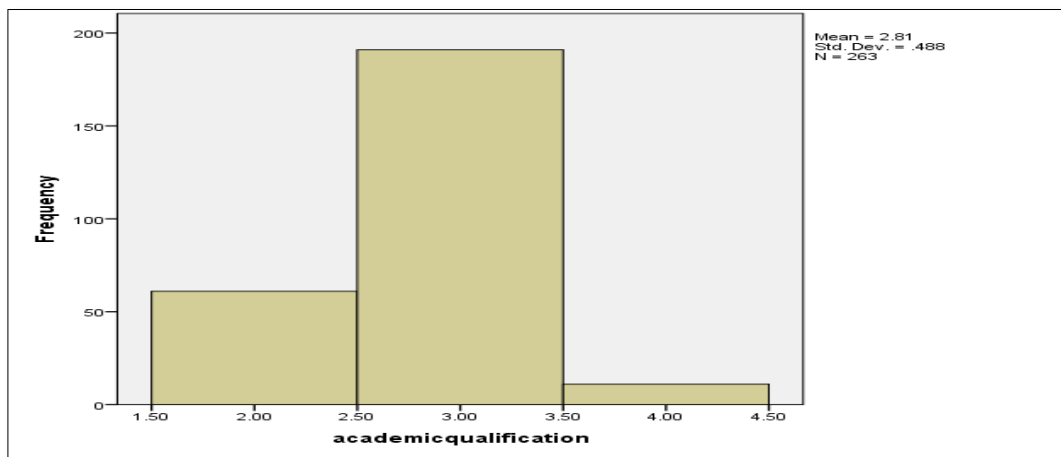
Fig 4.2 Professional qualification wise distribution of pre-school teachersof public and
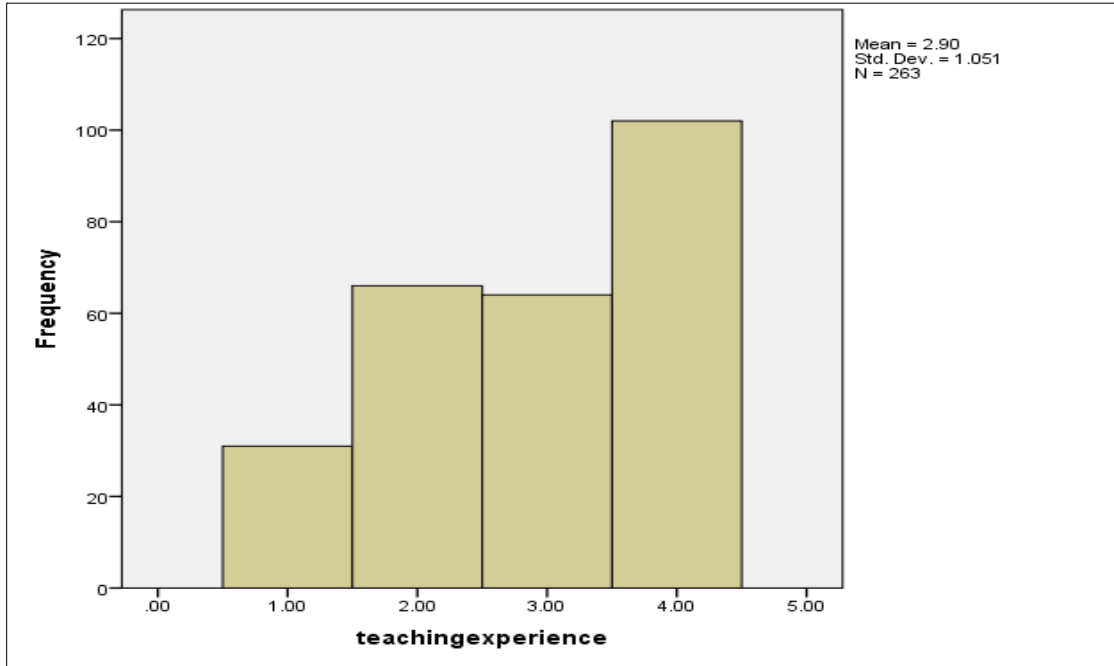private sector schools

Fig 4.3 *Teaching experience wise distribution of pre-school teachers of public and private sector schools*
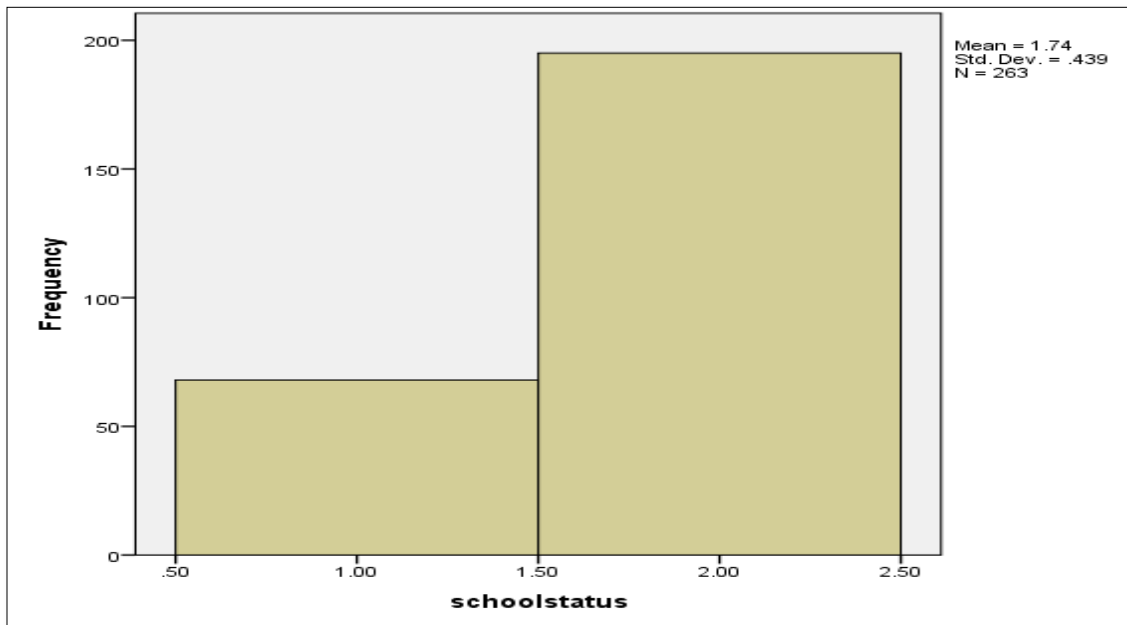

Fig 4.4 *School status wise distribution of pre-school teachers of public and privatesector schools* without any diploma.
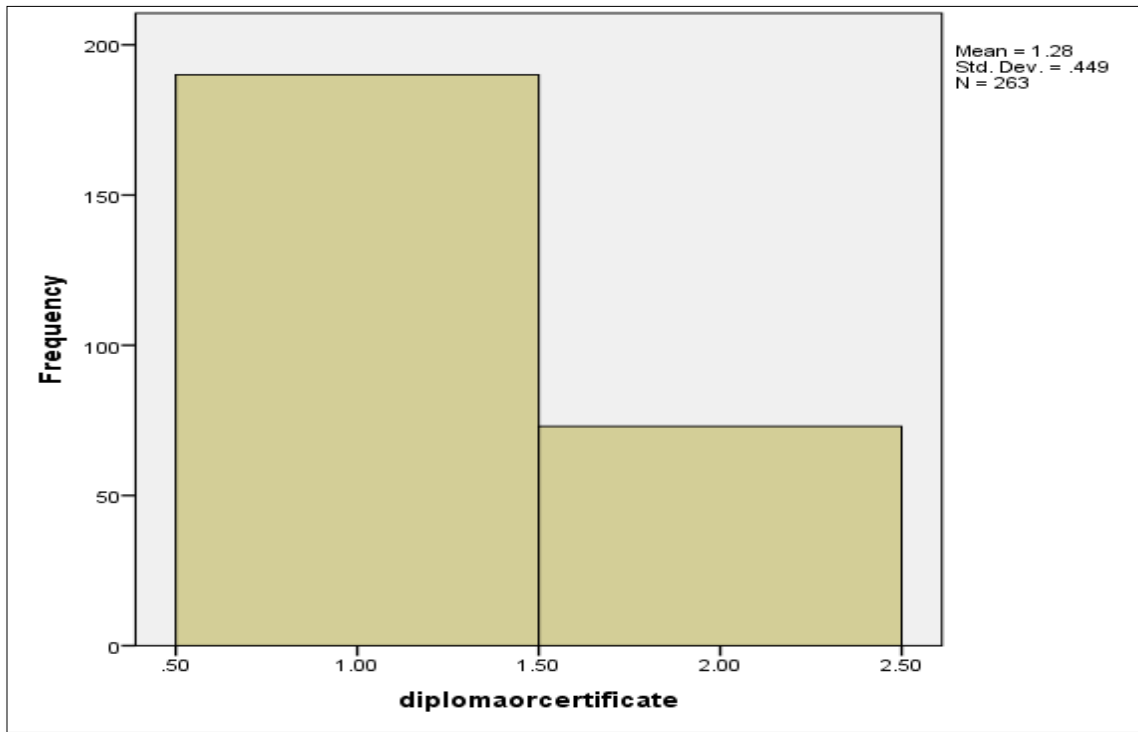
Fig 4.5 *Diploma or certificate wise distribution of pre-school teachers of public and*

Private sector schools