“A Study of Factors Conducive To the Development of Children Studying In Preprimary Schools”

A THESIS

Submitted for the Award of Ph.D. Degree

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To the

UNIVERSITY OF KOTA

By

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Place: Kota (Research supervisor)

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ABSTRACT

This thesis discusses the factors that affect and support the development of children studying in preprimary school. Preprimary school or kindergarten is an early childhood program in which children combine learning with play through a method used by professionally trained masters. Preschool is important for the foundation of learning and prepares a child for the next formal school where things would be more academic. Preprimary education comprises of three years i.e. from the age of three to six years of child which includes nursery, Jr. K.G/ L.K.G/U.K.G and Sr. K.G/ H.K.G. After this preprimary education, a child enters into primary education which is a first step of compulsory education.

It has been well accepted by researchers and educationists that preprimary education is vital to shape the entire life of a child. Therefore it would be worthwhile to study the factors conducive to the development of preprimary students. The **main objectives** of this research are (i) to study the physical, cognitive and social development of children studying in urban and rural: govt. and private preprimary schools (ii) to study the effect of curriculum, school infrastructure and teacher quality on the development of preschoolers and (iii) to study the inter-relation between physical, cognitive and social development of children studying in urban and rural; govt. and private preprimary schools. Null hypothesis has been proposed for the study stating no relationship between the variables.

In this research, a combination of three methods has been used. **Experimental method, survey method and observation method** have been used to complete the work. The population is the students studying in govt. and private preprimary schools of urban and rural areas of Kota district. Here in this research study 250 students from 5 govt. and 5 private preprimary schools of urban areas and 250 students from 5 govt. and 5 private preprimary schools of rural areas have been selected randomly by lottery method. In all **500 students** of these schools form the sample. A **random sampling technique** by lottery method was used to select schools and students for data collection.

The standardized tools used are Anthropometric test for physical development, Bhatia Battery for cognitive development and Eyberg Child Behavior Inventory (ECBI) for social development. A self made tool verified by experts is also used to determine the effect of curriculum, school infrastructure and teacher quality on the development of preprimary students. The statistical techniques used for the analysis of the collected data are mean, standard deviation, t-test and product moment (r) coefficient of correlation.

The key findings of the study are that there is significant difference between the height and weight of children of govt. and private preprimary schools of urban and rural areas but there is no significant difference between the body mass index (BMI) of children of urban and rural schools. It reveals that the students of private preprimary schools of urban and rural areas have better height and weight than that of govt. schools due to the better opportunities of physical activities in schools and good nutrition provided by the educated parents.

The cognitive development of the students of private preprimary schools of urban and rural areas is better than that of govt. schools of urban and rural areas. It is probably because of the better academics and more opportunities to new knowledge in the private preprimary schools.

The social development of the students of private preprimary schools of urban and rural areas is better than that of govt. schools of urban and rural areas. The social network formed from the literate parents, loving families and trained teachers provide them with ample opportunities to develop social awareness.

There is significant effect of curricular and extracurricular activities; school infrastructure and classroom environment; and teacher quality on the development of the children studying in preprimary schools. The enriching curriculum, good physical condition of the school and the remarkable quality of teachers affect positively the understanding levels of children.

There existed positive relation between the physical and cognitive; and physical and social development of students of govt. preprimary schools of urban areas. There existed no significant correlation between cognitive and social development of students of govt. preprimary schools of urban areas.

There existed no significant correlation between the physical and cognitive; and cognitive and social development of students of private preprimary schools of urban areas. There existed moderate positive correlation between physical and social development of students of private preprimary schools of urban areas.

There existed no significant correlation between the physical and cognitive development of students of govt. preprimary schools of rural areas. There existed positive correlation between physical and social; and cognitive and social development of students of govt. preprimary schools of rural areas.

There existed positive correlation between the physical and cognitive; and physical and social development of students of private preprimary schools of rural areas. There existed negative correlation between cognitive and social development of students of private preprimary schools of rural areas.

The study recommended the improvement in the access and quality of preprimary education in rural areas. The govt. preprimary schools need appraisals in respect of their curriculum, school infrastructure, classroom environment and the quality of teachers. New technologies should be introduced to make teaching learning interesting for rural children. Government should also take initiatives to enable the access of preprimary education to one and all, far and wide.

CANDIDATE'S DECLARATION

I, hereby, certify that the work, which is being presented in the thesis, entitled **"A Study Of Factors Conducive To The Development Of Children Studying In Preprimary School."** in partial fulfillment of the requirement for the award of the Degree of Doctor of Philosophy, carried under the supervision of Professor (Mrs.) Lilesh Gupta and submitted to the University of Kota, Kota represents my ideas in my own words and where others ideas or words have been included, I have adequately cited and referenced the original sources. The work presented in this thesis has not been submitted elsewhere for the award of any other degree or diploma from any Institutions.

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Date:_____ **Ms. Archana Sharma**

Place: Kota Research Scholar

This is to certify that the above statement made by Archana Sharma (Regd. No. RS/1214/16) is correct to the best of my knowledge.

Date:_____ **Prof. (Mrs.) Lilesh Gupta**

Place: Kota (Research Supervisor)

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Thank You God For This Great Work, Thank You God For Grace and Perk
Thank You God For Nice Time Too, Thank You God For All You Do.

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In the end, I would like to dedicate my thesis to my late beloved sister, **Mrs. Arpita Vyas** who would have been the most proud person at this achievement of mine.

Date:_____

Place: Kota

Ms. Archana Sharma

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INTRODUCTION

1.1 PREPRIMARY SCHOOL :

A preprimary school, nursery school, preschool, playschool or kindergarten, is an institution of education or learning space offering early education to children before they begin their mandatory education at primary school. Preprimary Education can be defined as “a set of knowledge along with skills and experience as well as behavioral rules which provides the essential for coping successfully in everyday life and at school.” This is acquired at a child care institution. Various types of Preprimary schools are now available in India and more and more children are now attending preschool, indicating a rise in the need for education of kids.

The different names of these institutions meant for the education of children of this age group are as follows:

1 Preprimary School – It is an educational child care service for children from 6 weeks old to 6 years old.

2 Nursery school (UK and US) – It is a preprimary educational child care institution which includes Day care, Preschool, Pre-K (pre kindergarten), and Kindergarten for children from 0 months to 6 years old.

3 Daycare (US) – In US, daycare or child care service are the institutes for children from a month to two and a half years old.

4 Pre-school (US and UK) – They are meant for children from 3 to 4years old.

5 Pre Kindergarten - They are meant for children from four to five years old.

6 Kindergarten (US) - They are meant for children from five to six years old - held in a nursery school and some primary schools; in many parts of world.

Though pedagogies differ, the role of preschool is indispensable for the foundation of further formal education. After attending preschool children gain confidence in all aspects and are better armed in comparison to those who do not. Preschool education gives students a head start and prepares them for the challenges of primary school. According to a highly cited and groundbreaking

2004 study published in the UK, preschool attendance enhances all round development in children.

ESSENTIAL CHARACTERISTICS OF A PRESCHOOL:

- It facilitates a good start for learning.
- The teaching is done through play-way method.
- Inculcates readiness for going to formal primary schools.
- It helps in the improvement of language.
- It provides a platform for the development of social skills.
- It helps in gaining confidence for communication skills.

OBJECTIVES OF A PRESCHOOL:

- Preschool helps a child to learn a lot. Cognitive development of the child is greatly emphasized as children learn due to interaction in a big group.
- Socialization is the most important feature of pre-school education. Children learn from each other through social interaction in a safe and monitored environment.
- Variety of activities like coloring with crayons, sketching, writing on board, solving jigsaw puzzles helps in motor development of the children. Both fine and gross motor development takes place due to these activities conducted in the classes under the supervision of teachers.
- The child becomes mentally and physically prepared for the more formal structured school.
- The children start taking care of their most valued possessions like pencil box, lunch box, water bottle etc.
- The oratory skills of a child are developed when a child recites poems, sings hymns, prayers and performs other activities like story-telling, role play etc. They learn to speak in groups. Such activities also boost their confidence level.
- Attending pre-school develops toilet training in them.
- Time management is another important feature of pre-school. Children learn assembly time, circle time, play time, lunch time, story time and fun time.
- Children start recognizing sounds. Phonological sense develops in them.

- Writing on board and doing free hand coloring and drawing leads to the development of pre writing skills.

1.2 PREPRIMARY EDUCATION:

Preprimary education is the first and foremost step towards the world of knowledge and healthy and eventful life of a child .It imparts confidence and independence in child and leads to over all development of a child. This issue raises lot many queries as- Are all children attending preschool? Which type of preschools do children belonging to different socio-economic groups attend?

The preschool tenure is India is divided into two parts- junior kindergarten (Jr. KG) and senior kindergarten (Sr. KG). The children of three to four years of age are in junior KG class and children of four to five years of age attend senior KG class. After Sr. KG a child enters in class1. These Jr. KG and Sr. KG classes are also known as LKG (lower kindergarten) and HKG (higher kindergarten). Kindergarten are an important part of regular school. Education in India is provided by the public sector and the private sector which draw financial help from central or state or local government. Children are sent to these schools according to socio-economic condition and background of their families. Children who come from poor sections join government schools whereas who belong to higher strata attend private preschools. Preprimary education i.e. education of children between three to six years is not a fundamental right. Because of this preprimary education remains neglected to a larger section of population and benefits very few children. The children of age group one to six attend preschool to improve in the field of academics. To bring about a holistic development that includes social, physical, cognitive or in general the development of emotions, excitement, expressions and communication, the child needs to attend pre-school. It also promotes an intelligence of self-determination and a positive likeness for others. The preschooler learns to accept and admit his mistakes. He/she learns to respect elders and shows love affection for the youngsters.

The children learn the culture of the society and the feel of independence is encouraged in them. They start utilizing their accent or other resources to converse up and doing on their personal morals. At this stage they begin to think

and express themselves in English and Hindi languages in the society besides their mother tongue.

The subjects that are taught at preprimary level of school academics for complete development are:

English :

The children learn all the skills of English like reading, writing, listening and speaking They learn to recognize phonic sounds of English alphabets. They start pronouncing words of two to three letters and later bigger words.

Mathematics:

The children learn counting numerals from 1-100. They perform simple calculations of one digit and two digit number. Addition, subtraction, multiplication, division, place value, money problems are taught to them at this level.

EVS (Environmental Studies):

Environmental studies is all about one's surroundings. This subject includes the study of plants, animals, fruits, mountains, sun, moon, clouds etc. Basically they learn about the general things of science and social science.

General Knowledge:

General knowledge teaches about body parts, systems of the body, name of organs of body, flower and its part, personal hygiene, great personalities, national symbols, patriotic songs, national anthem etc.

Art & Craft:

Drawing an object and coloring with different types of coloring concepts and craft work also become an integral part of learning at this stage.

Rhymes & Action Songs:

Recitation, sense of rhyme words and melody generate a special interest in learning in children. The interest is thus created with the help rhymes with body actions for example 12345, once I caught a fish alive.

Story Telling:

It involves role-play and dramatization of characters of stories. Example – The rabbit and the tortoise

Curricular & Extra-curricular Activities:

Extra-curricular activities like celebration of festivals, rakhi-making, kite making, rangoli-making, celebration of national festivals, playing Indoor and outdoor sports like kho-kho, sprints wheel and barrow race, lemon and spoon race etc. are organized.

Field Trip:

It includes picnics and trips to botanical garden, post-office, bank, historical places and their importance.

Individual & Group effort:

An individual child prepares lemonade and a group effort would be a group of children would arrange for special variety of sandwiches etc.

The children are the most prized possession of any parent and their education is the issue of utmost importance. The parents wish to provide the best possible education to their children. Now the scenario of education system has totally changed as compared to olden times when traditional practices of teaching limited essential subjects were only included into curriculum. The need of the present time has brought a drastic change in the educational patters. Education has become a broader term which means a complete development of a child, enhancing knowledge, exposing him to different ideas and making him familiar with the environment around him. Unlike olden times, nowadays parents start thinking about their child's education at the age of three and get them admission in pre-primary school and the process of education starts.

After independence especially in the past few years, India has made great progress in the quality and availability of primary education. The increase in the enrollment rate and decrease in dropout count is seen because of focus on policies and schemes related to primary education.

 The Right to Free & Compulsory Education Act 2009 – It gives the children between 6--14 years the right to free and compulsory education. It also sets standards of infrastructure, education quality and institutional mechanisms to be met by each state.

 Sarva Shiksha Abhiyan (SSA) -This scheme helps in the universalisation of the elementary education by providing for construction of new schools, teacher training, academic resources and tools for the improvement of learning outcomes.

 National Programme for Education of Girls at Elementary Level (NPEGEL) – It works for the improvement of education of girls in particular.

Preprimary education is vital for the development of young children before the beginning of formal school **(Kaul, 2002)**. It helps in cognitive development of children at the early classes of primary education and it has strong effect on attendance and participation of children once they enter primary school.

Preprimary education is undoubtedly important for the child as it is the first step towards entering the world of knowledge as well as a healthy and purposeful life. Preprimary education makes children more independent and confident as well as promote the holistic development of the children **(Ramachandran et al., 2003).**

Children who have been to preprimary schools tend to learn more rapidly through an organized curriculum, learning aids and by interacting with other children. The main objective of preprimary education is to develop children physically, emotionally, socially and mentally for primary and higher schooling and to improve performance and early drop out. It also opens way for older children, particularly girls, to attend their schools making them free from household chores. Therefore preprimary education is important for all children of 3-6 years old irrespective of their socio-economic background **(Govinda and Bandyopadhyay, 2008)**. Preprimary school education is becoming common with increasing numbers of nuclear families. Quality preprimary education will enhance inclusive education and meaningful access to school education by increasing enrolment and reducing the vulnerability of children to failure and drop out at higher stages of education.

The importance of preprimary education has been realized from a long time by the educational policy and program in India and it has also been a constitutional commitment as a part of the directive principles. The **National policy on Education 1986** has given immense importance on pre-school education. However, neither has it been considered a fundamental right nor is

being fully managed by the educational departments at national or state level. It is partially supported by the ongoing flagship educational program Sarva Siksha Abhiyan (SSA) which includes a major component of ECCE.

While the Ministry of Human Resource Development in India is responsible for elementary education, the **Ministry of Women and Child Development** deals with preprimary education.

The Department of Women and Child Development has been executing the projects which provide health care facilities, supplementary nutritional support and to improve children's communication and problem solving skills as a preparation for entry into primary school. In the beginning the program started as a project in some states but now it covers many rural and tribal areas along with some urban pockets targeting mainly underprivileged children. The SSA envisages providing preschool education in convergence with the ICDS program. Present scenario of Preprimary Education in India is that preschool education is provided by private schools and government ICDS (Anganwadi) centres. Besides, there are some ECCE centres under the supervision of SSA and some preschools are attached to government as well as private schools.

According to the report of **Seventh All India Education Survey (NCERT, 2005),** there are 493,700 preprimary institutions in India, out of which 456,994 are in rural areas. These schools teach 26.453 million children of which 12.829 million are girls according to **DISE (District Information System for Education) data (2007-08)**. The number of children in primary schools with preprimary facilities is low. It was 10% in 2007-08 compared to 7.7% in 2004-05. The third round **(2005-06)** of National Family Health Survey data **(IIPS, 2007)** depicts that 56% of children in pre-school are enrolled in Anganwadis (ICDS Centres) for early childhood care and education. Among them only 31% of children attend the centres. A big difference is also found in availability and access to early childhood care and education across the states.

. The quality of preprimary education in the tribal area is poor due to lack of qualified teachers and other administrative staff **(NIPCCD, 1992**). Facility of free food in the Anganwadi centres is the main cause of high enrolment in poor tribal areas.

The study (**NCERT, 2006)** shows that the number of boys' is higher than that of girls in preprimary schools. The field survey data shows that in preprimary education boys' enrolment in Anganwadis is slightly less than girls. But in private preprimary schools the boys' enrolment is much higher as compared to girls. Children whose fathers are employed in the service sector account for the highest proportion in total enrolment in pre-school education followed by children whose fathers are employed as labour or engaged in farming. The data shows that most of the children belonging to tribal groups are enrolled in Anganwadis (ICDS centres).

Although most of the children are enrolled, only a small proportion of them attend preprimary education regularly. The children who attend these schools are mostly from poor families who cannot afford private preprimary school. The other important reason is the availability of free food there.

CREATE INDIA POLICY BRIEF 1 (DECEMBER2010)

Policy Recommendations

It is quite obvious from the above discussion that the access of preprimary education varies among children of 3-6 yrs old depending on their varied socio-economic conditions. Children who come from backward sections of society depend on public pre primary schools whereas those who hail from good socio-economic conditions mostly attend private pre-primary schools.

However preprimary education is not legal as it is not a fundamental right. So it is suffering from inadequate coverage and poor quality benefitting to very few children. However, it is part of the Directive Principle and is also one of the EFA goals.

Preprimary education has a significant impact on the children so it should be given utmost attention.

- The quality of teaching in public preprimary schools and Anganwadi centres is unsatisfactory due to shortage of skilled teachers. Effort should be made by the government to improve the quality of service in Aanganwadi centres and preprimary schools to improve the achievement of children in preprimary education.

- The coverage of the ICDS program needs to be expanded to provide equal access of pre-primary education to all eligible children. More pre-schools should be opened and efforts should be made to improve the existing government primary schools.
- To ensure the quality of preschool education it is important to provide well qualified and trained teachers for pre primary schools.
- The preprimary education part of ICDS program often does not work on grounds and remain limited to papers. It is important to focus on the quality of preprimary education for the disadvantageous children living in poor conditions.
- Proper facilities are required and there must be safe, healthy and suitable surrounding for young children.
- Distribution of milk and free food is one big attraction that invites children to preschool. Such schemes should be maintained and expanded. It is a real nutritional help to the needy ones.
- The toys and games in most of the AWCs visited are locked up in cupboards. It is mainly because the people in-charge consider it to be risky to give costly games and library books to children. They use such costly material only on the inspection day.
- Different government departments need to implement pre-school education in a coordinated manner avoiding duplication and overlapping of interventions.
- The monitoring and evaluation of existing program such as ICDS and ECCE is another important issue that needs to be carried out more frequently to supplement the inputs into these program. This plays an important role for better planning and policy formulation to ensure wide coverage of quality pre-primary education in the future.

Though so much has been planned and efforts are been taken still India's preprimary education is below standard. The main reasons that account for the cause are the social and economical inequalities of caste, class, and gender which deprive the majority of children in rural India.

Although enrollment figures are high, trends over time show that children's attendance in both primary and upper primary schools was higher in 2009 as compared to 2016, with dropout rates staying consistent. The children who stay in school get sub-par education, with over 75% pupils finishing primary school unable to read basic sentences or do simple division.

"Primary education is essential as it provides the base of all formal learning" **(Sharma 1997),** preprimary learning is called the foundation for both education and personal development. The family and community function as a broader arena for holistic learning but formal preprimary education in rural India is poor. In urban communities, the level of preprimary education directly depends on the factors of class and wealth. Only the affluent and aware parents send their children for kindergarten and Montessori schools, while poor, neglected, underprivileged children languish in the streets of Indian cities.

In regard of national priorities, primary education holds a model a humanistic pedagogy, focusing on the needs of the child over all means and methods of education.

The basic facilities like uniform, books, bag, school building etc. exist because children need education. This fact has been accepted in the Program of Action of the National Policy on Education (1986) that states under its Implementation Strategies: The country's development in its future generations will be shown in the system of elementary education, which will get geared around the centrality of the child (11). (1997)

A 1988 governmental reform of the primary curriculum set forth the principles that were to govern this type of education. Students were entitled to a "broad and balanced curriculum" including such diverse subjects as religious education, science, and technology. In addition, the standards for students' academic achievement were to be raised, and assessment methods were to serve "formative purposes" **(Venkataiah 2000).**

The implementation of these goals is somewhat confounded by the diversity of India's population and the complexity of its governance. In practice, primary education is a dilemma-ridden field where teachers, schools, communities, and states muddle through a rugged terrain without consensus. As a

result, local, regional, and political influences override the foundational issues in pedagogical discourse. In particular, zealous religious groups have been divisive.

S. Venkataiah, a leader in primary and secondary education in India, argues that the legal force and the professional support, even the very goals, of the 1988 reform act created a problem of manageability: "One of the paradoxes was that there would have been no manageability problem without the principles embodied in the curriculum required by the 1988 Act" **(2000). Venkataiah** identifies three types of problems that arose for those charged with managing the curriculum at the school level: curriculum time allocation, teacher expertise, and resources in primary schools.

A further problem with meeting the expansive goals of the nationally determined curriculum of primary schools has been many teachers' shallow approach to education. "The dominating difficulty in the purpose of primary schools is the fact that 'knowing' is rated more highly than 'teaching,' despite the importance of the latter and its equally intimate connection with 'learning', writes **Venkataiah (2000)**.

Venkataiah adds: "The agency responsible for the National Curriculum advised the Government that the statutory curriculum would have to be slimmed down; the agency responsible for the national inspection arrangement reported that those schools that had nearly covered the statutory curriculum had done so only by encouraging superficial learning in their pupils**. (2000)"**

Initiatives: Universalization of the entire educational system has been the main goal of government since independence. Formal and non formal primary education, however, have been the main challenge to this goal. Universalization of Elementary Education (UEE) is fraught with systemic and socioeconomic factors that call for massive public education and advocacy. A total-literacy campaign is underway despite numerous barriers. Even provision of textbooks in poverty-ridden areas is a challenge. A comprehensive program seeks to target "i) teachers and all those involved in education of children; ii) students and parents of students, particularly non-literate parents; and iii) community opinion leaders" (**Government of India 2001).**

Residential education of girls, especially from broken homes and poor families, has lately received planners' attention. A program named after Mahatma Gandhi's wife, the Kasturba Gandhi Shiksha Yojana, has been funded with Rs. 2,500 million (rupees). Other financial incentives and scholarships for poor girls have been provided. All such programs, as recorded in the **NPE-1986**, "pay special attention to increasing girls' enrollment, improving educational outcomes, strengthening community involvement, and improving teaching and learning materials and providing in-service teacher training" **(Government of India 2001).** The status of some of these initiatives is discussed below.

Operation Blackboard*:* This is a scheme aimed at providing basic facilities to raise the environment of school. A large number of primary schools have been changed under this project.

Decentralization: The government of India has decentralized the management of elementary education, as suggested by the NPE wherein it has been emphasized that there should be direct community involvement in the form of Village Education Committees (VECs). The 73rd and 74th constitutional amendments provide for decentralization of the local self-government institutions, called Panchayati Raj Institutions (PRIs). PRIs are the main source of delivery of education in rural and urban communities. PRIs are especially beneficial for the backward groups- women, Scheduled Castes and Tribes, and minor communities. This method is really beneficial for the delivery of primary education. Decentralization has been reinforced during the Eighth Five-Year Plan. To make decentralization possible the VECs, District Primary Education Program, and Lok Jumbish have greatiy contributed. In service training program for Primary Teachers has further provided support to primary level teachers. During 1992 to 1993 and 1995 to 1996, Rs. 8,163 million was allocated; the outlay for 1996 to 1997 was Rs. 2,910 million. More recent data is not available.

Shiksha Karmi Project and Lok Jumbish projects aim at inspiring the village community to take responsibility for ensuring quality education to every child and to universalize and improve primary education. Community involvement has been crucial for the success of these projects.

Shiksha Karmi Project: The Swedish International Development Cooperation Agency has helped in the implementation of the Shiksha Karmi Project. The project aims at universalization and improvement in the quality of primary education in the far off and economically disadvantaged villages of Rajasthan with special emphasis on girls. This Project has formed VECs in 2,000 villages to increase community involvement in primary education and promote village-level planning. The role of the VEC is to utilize resources for maintenance, repair, and construction of school infrastructures. The VEC also helps in deciding the school calendar with the consent of the local community and *Shiksha Karmis* (educational workers). *Shiksha Karmis* are often used as substitutes to compensate for teacher absenteeism.

In addition to the more formal courtyard schools (*Angan Pathshalas*), the Shiksha Karmi Project also runs non-formal classes called *Prehar Pathshalas* (schools of convenient timings). For girls' education, *Angan Pathshalas* are run in three blocks. As of 2001 the program covered over 150,000 students in 1,785 schools and 3,520 *Prehar Pathshalas,* involving over 4,271 *Shiksha Karmis.*

Lok Jumbish Project: Lok Jumbish is extended to 75 blocks covering a population of approximately 12 million in Rajasthan. The project involves government agencies, teachers, nongovernmental organizations (NGOs), and elected representatives to promote universalization of primary education. The seven guiding principles of Lok Jumbish are (a) a process rather than a product approach, (b) partnerships, (c) decentralized functioning, (d) participatory learning, (e) integration with the mainstream education system, and (f) flexibility of management.

District Primary Education Program (DPEP): The aims of DPEP, a major program to implement UEE, are

- to provide primary education to all children either in the formal system or through the non-formal education (NFE) program;
- to decrease gap in enrolment, dropout rates, and learning achievement among gender and social groups to less than 5 percent;
- to decrease overall primary dropout rates for all students to less than 10 percent;

- to raise average achievement levels by at least 25 percent and
- to acquire achievements of basic literacy and numeric competencies and a minimum of 40 percent achievement levels in other competencies by all primary school children.

The Government of India finances 85 percent of the project cost as a grant to the DPEP State Implementation Societies, and state governments provide the rest. As of 2001, the International Development Agency (IDA) of the World Bank had approved credit amounting to $260 million and $425 million under Phase I and Phase II of DPEP, respectively. The European Union is providing a grant of 150 million euros. The ODA (of the United Kingdom) is extending a grant of $80.21 million, and a grant from the Netherlands amounts to $25.8 million.

The main projects are summarized below to exemplify varied governmental objectives.

National Program of Nutritional Support to Primary Education (School Meal Program)*:* Providing a free, nutritious cooked meal of 100 grams of food grains per school day to all children in classes I-V is an ambitious program in a country of 1 billion people. The program was launched in 1997 to 1998 to support UEE in achieving its goal of increasing enrollment, retention, and attendance in primary classes. In 1997 to 1998 the program covered nearly 110 million children in primary classes. Reportedly school enrollment and rates of retention have increased

There are many factors which combine in this vast education sector, compiling a neat amount of plus points for the growth of Preschool education in India. To ensure the quality of preschool education it is important to provide well qualified and trained teachers for preprimary schools. Facilities and Amenities are important and must provide safe, healthy and suitable environment for young children. Free food distributed in pre primary schools plays an important role in helping the poorest sections of society and curbing nutritional problems. These schemes should be well maintained and expanded. Pre schools are diverse all around the world, with a variety of different institutions that have been developed

for children ranging from the ages of two to seven, depending on the country concerned.

The importance of preprimary schooling has been recognized by educational policy and programmers in India and it has also been a constitutional commitment as a part of the directive principle of the constitution. All in all the preprimary education scene in the country is on a boom, yet with mixed reactions as there are still many loopholes to be filled in various fields.

1.3 PREPRIMARY EDUCATION IN RAJASTHAN :

TIMES OF INDIA, JULY 11, 2015

"Rajasthan drafts child education policy for pre-schools"

"Rajasthan govt. is drafting the early childhood educational policy for both govt. and private pre-schools. The state has initiated a process to make a policy for the development of child and to check the growth of pre-schools in the state.

The Aanganwadis will be provided research kit containing teaching learning material. The learning hours should not be more than 3-4 hours and no admission test would be taken. Toys and other play-way methods would be used to make learning an interesting exercise. Mother tongue would be used for interaction and the ideal student teacher ratio would be 1 : 20 . The policy also includes health care measures and protection from hazards. The early childhood age is defined as first six years and early childhood education is from 3-6 years of age."

SWANITI INITIATIVE, NOV 2017

Primary education in Rajasthan

"Emphasis should be placed on primary education in the state, with 24% of Rajasthan's population between the ages of 6 and 14. Rajasthan has 105379 elementary schools, with 497300 teachers. Even though nationwide literacy is improving, with an average of 74%, Rajasthan has reported one of the lowest literacy rates in the country at 67.1%. Further, the state has the lowest female literacy rate of 52%.

This report is an examination of the existing status of primary education in India and in Rajasthan, analyzing the financial resources spent, as well as the

status of RTE implementation across parameters such as human resource, student enrollment, academic performance, and infrastructure requirements.

Expenditure

Rajasthan is hit badly by this problem, with up to 25% of schools not receiving maintenance grants, and even less receiving money for development. Figures show that the receipt of funds in Rajasthan is lower than the national average.

RTE Implementation

Pupil teacher ratio: A dearth of teachers greatly hampers the quality of education given in schools, especially in the primary stages, when individual student attention is crucial for development. This shortage of trained teachers can be due to a shortage of training institutes or a lack of incentive. The target ratio in India is 30:1, with the average at 23. India has a long way to go, with countries like China boasting a ratio of 16:1. Rajasthan has a commendable figure of 17:1, showing that availability of educators is not a critical issue.

Teacher Attendance: Although there may officially be an availability of teachers in primary schools, a common problem is their lack of attendance, leading to an absence of regular and everyday instruction for children. Rajasthan's teacher attendance stands at about 85.9%, which matches the national average. However, a problematic sign is the dip in attendance rates from 2010, when it was at 90.1%. This is a worrying trend, and must be checked to ensure it does not worsen.

School Management Committees: Under the provisions of RTE Act, constitution of a School Management Committee in every Government elementary school is mandatory, with 75% of members from amongst parents or guardians of children. These committees are a link between the school and the community, and also ensure RTE compliance and implementation. India has a national average of 94.8% schools that have reported having set up at SMC. Rajasthan surpasses this figure with 98.2%, joining several other states that have SMCs in almost every school.

Education for Girls: The most troubling statistic regarding primary education in Rajasthan is the number of girls who are not enrolled in school. Rajasthan is the second worst performer in the country with a 9.7% rate -- almost double of the national average. Efforts must be made by the state government to employ various schemes and tools for support, in order to encourage and incentivize families to send their daughters to elementary school.

Academic Performance: Significant proportions of children who complete primary education do not have the required competencies in reading or arithmetic, and are inadequately prepared for secondary school. This is a possible cause for the sharp incline in dropouts seen at the secondary school level. This report uses children of 5th standard who can comprehend sentences, and those in 3rd standard who can subtract, as representations of English and arithmetic competency respectively. Rajasthan considerably lags behind the national average on both counts, showing a clear deficit in the quality of instruction at the primary level.

Infrastructure

Rajasthan fairs well in terms of infrastructure availability, and has implemented the RTE impressively in terms of toilet facilities and mid day meals. However, Rajasthan falls drastically below the national average on parameters of electricity and computers, while also lagging in availability of playgrounds, disabled friendly access and libraries."

DNA INDIA, MAY 31, 2018

"According to sources, to provide holistic and quality education at pre-primary, primary, upper primary, secondary and senior secondary levels, the govt. of India has launched the SMSA. It is an overarching program for the school education sector from pre-primary to 12^{th} class with a vision to develop school effectiveness in terms of equal opportunities of schooling to all and equitable learning outcomes.

As of now the RCEE (Rajasthan Council of Elementary Education) and RCSE (Rajasthan Council of Secondary Education) were taking care of SSA

(Sarva Siksha Abhiyan) and RMSA (Rajasthan Madhyamik Shiksha Abhiyan) centre sponsored schemes respectively. These two tasks will be executed by the new body, RCSCE, which will monitor, supervise and implement education from pre-education to class 12 under SMSA (Samagra Shiksha Abhiyan)."

THE TRIBUNE SEP 21,2019

" Preprimary education is all set to become an integral part of the school system with the education ministers of all states .The approval came at a meeting of Central Advisory Board of Education (CABE), the highest policy making body on education which HRD Minister chairs. State education ministers are CABE members. In a key proposal the draft NEP sets the timeline of 2025 to make early childhood care and education (ECCE) an integral part of the Indian school system. ECCE is currently not a part of the formal system is handled through anganwadis in the Integrated Child Development Scheme of the Women and Child Development Ministry. ECCE relates to children aged zero to six years."

1.4 DEVELOPMENTAL MILESTONES OF CHILDREN :

Children grow in steady, predictable steps, achieving one developmental milestone after another. Between the ages of three and six, your preschooler will fine tune his or her motor skills and experience significant physical, cognitive, sensory and language growth. Preschoolers show quick growth—both physically and cognitively. A short chubby toddler who can hardly talk all of a sudden becomes a taller, leaner child who talks incessantly. In the early childhood the development is truly integrated: The biological, psychological, and social changes occurring at this time (as well as throughout the rest of the life span) are interrelated.

1.4.1 PHYSICAL DEVELOPMENT BETWEEN 3-6YRS

Physical development is the development of motor skills. Fine motor skills are necessary to engage in smaller and more precise movements, normally using the hands and fingers. Fine motor skills need complete precision whereas gross motor skills require less precision to perform.

Motor skills refer to the use of muscles with perfect control while carrying out activities like running, jumping, sliding etc. Some fine skill development involves using the body's smaller muscles as is used in sketching, cutting, coloring, holding a pencil and writing. It includes hand-eye co-ordination. The various aspects of child's development are as follows:

Balance:

Child starts showing balance in various activities that he conducts like climb, walk, jump etc. He learns to walk without watching his steps, avoids obstacles and runs at a pace that is even. A child also stats riding a bicycle, jumps from height and learn to prevent from a fall.

A child feels excited about physical activity like kicking ball , catching and chasing ball and sleeps soundly after getting tired .

Dexterity:

The child also develops control and dexterity while conducting complicated activities like using scissors or a hammer. He also acquires excellence in eye-hand co-ordination and improves his skills of puzzle game, building blocks, drawing shapes and coloring them. Providing more opportunities to your child to play with blocks, hold crayons and solve the puzzle will them improve their motor skills. Child seeks pleasure in playing with water, bathing himself, getting dressed and tie laces. A child might show a preference in using left or a right hand.

Independence:

A child also slowly learns to become independent by this age. He wants to do his job independently. Day to day activities like brushing teeth, bathing, dressing up, wiping his face are carried by him. He starts sensing danger and learns to stay away from such objects and activities that are dangerous. With more control over his movements and reflexes, his urge to be independent increases. Delays in physical development milestones may need clinical help.

1.4.2 SOCIAL DEVELOPMENT BETWEEN 3-6YRS

Social development means a process by which a child learns to adjust and interact with others around them. Social development is about socialization of

people. This means development of a quality which enables a person to mingle well with people in the surrounding. The self concept i.e. idea, belief and knowledge of oneself help the child to understand himself/herself. The criteria that assess the improvement of self concept in them is how well they are able to succeed with their studies , home work ,school programs and how well they adjust with their family and friends.

Children learn about social practices through their contact with parents, family, teachers, care takers and friends. The social network formed from this, provide them with ample opportunities to develop social awareness. In early childhood, children acquire some sense of being a separate and independent individual who does not depend upon parents.

The preschool age of 3-6 yrs is a magic age when a child shows a shift from being dependent on parents to somewhat independent in the world. The knowledge and skills develop. The preschool years begin with the tail end of Erikson's second stage of psychosocial development: Autonomy vs. Shame and doubt. In this stage, children become independent in jobs like bathing, eating, using washroom, dressing themselves etc. The third stage of psychosocial development is attained at around the age of four years: Initiative vs. guilt. Over the course of this period children become independent and start imagining things. The games they play, the activities they conduct, things they explore improve their skills. They attain certain values of teamwork and cooperation in the process. According to **Erikson,** the objective of preschoolers is to develop **autonomy**, or **self-direction** (ages 1–3), as well as **initiative**, or **enterprise** (ages 3–6).

According to **Freud,** when the child is of two tears he enters the **anal stage** of psychosexual development, and the parents have to come across a lot of difficulty to teach toilet manners to their children. Fixations at this stage give rise to the characteristic personality traits of anal retention (i.e. excessive neatness, organization and withholding) or anal expulsion (messiness and altruism), which emerge in adulthood.

Social Development Milestones in Early Childhood

A lot of socialization takes place in a child in preschool, where the teachers, peer and parents play an important role in promoting positive social

skills during this stage. The milestones of social development in preschoolers and toddlers are:

Between age 2-3 : A child starts showing a lot of expressions but may show restriction to major changes in their daily routine. By 3yrs of age a child starts to separate from parents more easily.

Between age 3-4: By 3-4 yrs, the preschoolers become more independent and finds their own way of playing. They sometimes start pretending as elders (mom or dad) or live in their own fantasy land. While in the company of friends they become more cooperative in nature.

Family and its bonding are critical to the physical, mental, and social health of developing preschoolers. Various aspects of the family such as parenting techniques, discipline, the number and the birth order of siblings, the family's economic standard, circumstances, health of family members all contribute to young children's psychosocial development.

Factors that affect the social development of a child

Parenting in early childhood

Parenting techniques vary with the parents. The culture and community, the situation and the child's behavior decides the parenting technique employed by parents. Parents show their control by being restrictive in their use of parental technique, whereas parental warmth shows the degree to which they are loving, affectionate and approving in their use of these techniques. The willingness of parents to negotiate common goals with their children is highly desirable. However this does not show that everything within a family system is negotiable. Both the parents and the children should not be 'in charge' all of the time. If it happens then it leads to unhealthy power struggles in the family. Parental negotiating gives a message of quality relationships and teaches that both parents and children are equal in terms of sharing rights, responsibilities, and decision making. Most negotiating home environments are warm, accommodating, and mutually supportive.

The different kinds of parenting are:

Authoritarian parents: They demonstrate high parental control and low parental warmth while parenting.

Permissive parents: They demonstrate high parental warmth and low parental control while parenting.

Indifferent parents: They demonstrate low parental control and low warmth.

Authoritative parents: They demonstrate appropriate levels of both parental control and warmth.

Siblings in early childhood

The child first interacts and plays with the siblings. They are the foremost peer group, a child is exposed to. Elder siblings of the family leave a lot of impact on the younger ones. The preschoolers learn as much from their siblings as from their parents and in some cases, siblings are closer and influential for them. Despite the age difference sibling relationships mirror other social relationship. They are only brothers and sisters who simultaneously share equal and unequal status in the home, and they can only provide opportunities to practice coping with the positives and negatives of human relationships.

However, it does not mean that 'the only' child is at any kind of disadvantage. Research confirms that 'onlies' (plural of only) also are in no way less than others in performance. If they are not better than other children; on account of personality, intelligence, and achievement; at least they perform as well. The children who are first child of the family or the "only children" may receive the undivided (or nearly undivided) attention of their parents, who in turn have more time to read to them, take them to museums, and encourage them to excel.

Friends and playmates in early childhood

Friends and playmates are an asset for everybody. In early childhood friends start appearing at about the age of 3yrs though a child plays in the company of other children much before that. Just like grown-ups children also find friends who have common interests and common taste. They offer help to each other and are similar in size and looks.

In the company of friends, the preschoolers flourish and find opportunities to handle anger-provoking situation, to share, to learn ethics, and grown-up behavior. Those preschoolers who are famous with their friends perform excellent in all activities. Those who are not famous may also perform better with a little

boost up given by the adults. The family attachments during the early childhood may decide the ease with which children form relationships. Children who share a strong bonding and have loving, stable, and accepting relationships with their parents and siblings are generally more likely to find the same in friends and playmates.

According to **Erickson** if a child does not accomplish these goals, the child needs a clinical support:

(a) Enjoys playing in small groups with children of same age.

(b) Interested in exploring varied environments, such as new playgrounds or friend's house.

(c) Is able to play in social situations.

(d) Is aware of risks and unsafe environments.

(e) Enjoys swinging and playing with new toys.

IMPORTANCE OF SOCIAL DEVELOPMENT:

Social development is a complete development of a child's personality. Getting along well with the people, helps almost in every aspect and enables a person to bear the pressure and take the challenges in a sporty manner. Interaction with people, also enhances the speech and communication skills. When a child expertise communication skills, then he becomes a better person in regard of responding and reacting. A healthy group of friends strengthens a child's comfort level and his own individuality. Stronger self esteem and effective communication skills help a child to solve conflicts and trivial fights among friends. Such kind of children can adjust well in any school and in any kind of environment but those who don't have such abilities face academic difficulties. Positive attitude is automatically developed which makes the child confident. Parents stand first in this responsibility of giving opportunity to develop a relationship, communicate and interact. As a parent, one should help the child to express the emotions, play with the child in a 'peer-like' manner and encourage cooperation through play way method. Love should be shown by parents through words and physical affection.

It turns out that socialization is actually an important part of early childhood development and promotes positive outcomes later in life. Even better news is that

social skills can be taught, similarly to academic subjects like math, reading or science.

The various benefits of social emotional learning programs are as follows: More positive attitudes toward school

- Positive social behavior
- Better academic performance
- Fewer discipline problems
- Fewer emotional problems

At **Little Sunshine's Playhouse & Preschool**, we understand that early childhood education also plays an important role in developing social skills by teaching kids how to interact with peers, cope with stress and solve problems. One long-term study found that 28-year-old adults who had attended high quality preschool enjoyed higher incomes, greater job prestige and better socioeconomic outcomes.

Benefits of Preschool Socialization

One child expert notes that socialization with non-family members in a safe environment is actually foundational to other areas of learning and development, and quality preschool provides the perfect setting for learning a number of important social skills.

Cooperation, respect and teamwork-Preschool helps kids develop skills like sharing, taking turns and working as part of a team to complete a task. It also fosters listening, respect for different perspectives and treating everyone equally.

Appreciation for diversity- Attending preschool means children get to interact with teachers and peers who may have different cultural backgrounds or life experiences. This teaches everyone to value differences and to become positive contributors to society.

Self-awareness and self-management- Preschool promotes the ability to recognize and regulate one's thoughts, emotions and behaviors out of respect for others.

Social awareness and relationship skills- This includes the development of empathy and the ability to see other people's perspectives, as well as the ability to build and maintain healthy relationships.

1.4.3 COGNITIVE DEVELOPMENT

Cognitive development refers to the development of thought processes, problem solving, memory and decision making. Cognitive development means person's ability to perceive and understand his or her world through the interaction of genetic and learned factors. Some of the facets of cognitive development are information processing, intelligence, reasoning, language development and memory. The cognitive development starts from the birth itself when the child starts collecting and processing information from the surrounding and develops perception and thinking skills.

No. of tests have been devised over time to measure cognitive development of children. The oldest is intelligent test like **Stanford Binet Intelligence Quotient** (IQ) test which was first adopted for use in the United States by psychologists **Lewis Terman** (1877-1956) in 1916. I.Q scoring is based on the concept age, while a gifted child's performance is comparable to that of an older child. Behaviorist researchers like **John Watson** (1878-1958) and **BF Skinner** (1904-1990) gave learning theories that proposed that children are malleable. Learning theories emphasize on a child's ability to learn by having certain behavior rewarded and others discouraged.

PIAGET'S THEORY OF COGNITIVE DEVELOPMENT:

Preschoolers present an exquisite example of the manner in which children play an active role in their own cognitive development. They show their skill development in comprehending, explaining, organizing, manipulating, predicting and constructing. The young minds also see patterns in objects and events of the world and then make an effort to arrange those patterns to explain the world.

But the preschoolers at the same time show some cognitive limitations. Children show trouble controlling their own attention and memory functions, confuse superficial appearances with reality, and focus on a single aspect of an

experience at a time. Almost in all cultures, children are prone to make same kinds of immature cognitive mistakes.

French psychologist **Jean Piaget** (1896-1980) gave the most accepted and influential theory of cognitive development. According to Piaget a child's knowledge is comprised of schemas, basic units of knowledge that helps to organize past experiences and serve the basis for understanding new ones. Assimilation i.e. receiving new information and accommodation are the two complementary factors to modify schemas. Piaget gave four different stages of cognitive development. They are as follows:

(i) Sensory-motor stage (INFANCY)

The first stage lasts from birth to two years old. This stage is marked by lack of sense of logic and thought. This stage is further subdivided into six sub-stages which focus on the development of child at different months till two years.

(ii) Pre-Operational stage (2yrs-6yrs)

In this stage a child's behavior is directed by principles like egocentrism and animism. Egocentrism means a child perceives a particular situation in his or her own way without understanding that other people think differently. Animism is going human like qualities to a lifeless object. This stage lacks the cognitive structures possessed by the concrete operational stage.

(iii) Concrete operational stage (6/7-12/13yrs)

This stage lasts from 6/7 until adulthood. The child attains the ability to reason things.

(iv) Formal operational stage (12/13-adulthood)

It lasts from 12/13 until adulthood. The child advances from logical reasoning with concrete examples to abstract examples

1.5 FACTORS AFFECTING THE DEVELOPMENT OF STUDENTS OF 3-6 YRS:

1.5.1 IMPACT OF CURRICULAR AND EXTRA CURRICULAR ACTIVITIES.

Education is a comprehensive concept that is not bound within the four-walls of a classroom. Its main aim is all round development of a child which

includes physical, social, moral, intellectual and sensible development. Balance has to be maintained between syllabus, curriculum, books and also co-curricular activities beyond that. Co-curricular activities are the activities that go along the curricular activities. These activities are conducted out of the classroom to develop particular skills and non-academic abilities like art, music, dance, drama etc. Besides these there are options of school sports club, newsletter, debating team.

According to a **Chinese proverb** "Teach me, and I will forget. Show me, and I might remember. Involve me and I will never forget." It is easy to gain theoretical knowledge when the content is conveyed through an activity. Co-curricular activities help in developing the aesthetic qualities like character building, spiritual and moral values, physical growth and creativity. It also improves coordination, adjustment and speech fluency, extempore and debating skills amongst students. These activities provide a platform for the students to mould their all round development.

The major benefits of co-curricular activities are:

Overall personality - Appreciation and experiences gained by children during these activities help them to improve confidence in various fields.

Developed specialized skills - These activities train the students in various specialized skills and help them to reach their objectives.

Improved academic performance - The students who pursue their hobbies achieve better results in studies. They learn to manage their time effectively.

Greater opportunities - Participation in co-curricular activities give more opportunities to the students while taking admissions into various popular courses.

Sense of responsibility - Taking responsibilities and coordinating things are developed in students.

The rewards are many and the students who participate in extra-curricular activities feel motivated and it leads to a happier, healthier and a more cohesive school.

1.5.2 IMPACT OF SCHOOL INFRASTRUCTURE AND CLASSROOM ENVIRONMENT:

School is second home to a children which caters all the important functions from boosting their confidence, providing them opportunities to perform to making them learn team work. The infrastructure plays a vital role in fulfilling the immense expectations with which a child is put in a school. The school assures a wholesome development of a student. Researches and studies conducted to figure out the effect of infrastructure suggests that students studying in schools with poor infrastructure have lower achievement scores in comparison to the others studying in schools with good infrastructure. Though in some cases students perform well despite poor facilities but they are gifted ones. Researches and psychologists suggests that even the environment of the school, the site , noise level , temperature affect the understanding levels of students. Physical conditions can affect the child in negative or positive manner. School building, classroom, playgrounds, activity areas, libraries, auditorium are the most important aspect of school infrastructure. Facilities like halls, games equipment, sanitary facilities are some essential amenities.

The essential requirements of quality school infrastructure, according to the experts should include comfort for students, teachers and administrators. Proper space with proper ventilation, lighting and adequate temperature is utmost requirement. Water facility, internet services and sanitary services are important.

Area required for the development of cultural skills includes play area, auditorium, entertainment etc.

DANIEL RIVERA, **Social Development Project Director at CAF, Development Bank of Latin America,** states "The improvement of the physical condition of schools is as closely related to learning as other educational inputs including home environment, motivation, good teachers, libraries or student services."

A school is actually second home for any student as a lot of time is spent there also. During student life most of the waking hours of any student are spent at school, learning anything and everything in various dimensions from books,

teachers, peers and even school environment. There is no doubt about the significance of a school in shaping up a student's personality and holistic learning process. Infrastructure of any school is as important as an experienced teacher and teaching methods. It plays a critical role in shaping students' academic lives. It creates a favourable environment for students' holistic development. No parents want to compromise with the quality of school when it comes about the teaching and learning of their children. They wish to spend money where their kids feel safe and secure while learning and enjoying their student life. They want to be assured about the safety standards and facilities to make learning a joy.

Some of the key components which should feature in an ideal checklist while assessing any school infrastructure are as follows:

- Spacious and well- ventilated classrooms
- Libraries
- Playgrounds
- Well-equipped labs
- Facilities like comfortable study tables, chairs, furniture and basic utilities
- Study halls
- Games equipment
- Assembly area
- Well-maintained sanitation facilities

A review of the most recent literature indicates that investment to improve school infrastructure has effects on the educational quality at least in the following three dimensions:

- Attendance and completion of academic cycles-According to **UNESCO**, the school drop-out rate in Latin America is 17%, and greater in rural areas. Several studies have found that physical conditions of school buildings positively affect school completion rates and increases registration.
- Teacher motivation- In fact, the study found that infrastructure had a greater effect reducing absenteeism than teacher salaries.

- Learning results- Studies carried out in the U.S ,such as the one conducted by 21st century school fund in 2010, found positive results which showed that there is significant effect of school infrastructure and performance of a child many parts of the country . It proves that school's infrastructure directly affects the educational performance, and that investment in educational infrastructure contributes to improve the quality of education and the economic performance of countries. **RIVERA** explains, "To improve investments in education it is important for authorities to observe the significant role of infrastructure and other essential educational inputs to be able to undertake comprehensive proposals that together, improve the quality of education, thus promoting greater equality of opportunities and contribute to reduce inequalities and advance towards a real productive transformation in the region."

The surrounding of a child in a class affects him. The lay out, furnishing, material, timetable and spacing are few of the important elements to affect the teaching and learning of a child. A child spends a good amount of time in a classroom and it can be purposely created to help support healthy development. It helps to develop skills to achieve success in global society. In this respect it is crucial to –

Salford University's report suggests that by putting an average ability student in the least effective as opposed to the most effective classroom environment could affect their academic progress by as much as the average improvement across a year . The dynamics of the classroom is changing. The cordless device has allowed the teacher to access every corner of the classroom. Teachers can be in between the rows paying individual attention instead of standing in front of the classroom most of the time. In primary school classrooms, there should be designated areas for activities, a 'reading-corner' and an area for activity play. Well planned and well designed classrooms are also easy to adapt, giving both students and teachers a sense of ownership for their space.

Adequate amount of light is another important factor to take care of. If there is no proper source of enough natural light then artificial light should be there. This helps to reduce eye-strain and keeps and keeps the students attentive. The furniture also matters a lot especially in case of the pre-primary students. It should not only be comfortable but also should help the student maintain right posture.

The storage in a classroom should be cleverly used to keep the classroom free from clutter and help them to develop the sense of cleanliness. There is a lot of evidence to say that while students should be able to see their work on the walls, at least 20% of wall space should be kept clear. Hidden storage, fixed storage or wall units can help to make classroom look tidy. These few practical changes in the classroom environment can have a major impact on creating a positive learning experience. These changes will enhance students' wellbeing and create a learning space in which both students and teachers can perform to the best of their ability.

1.5.3 IMPACT OF TEACHERS IN PREPRIMARY EDUCATION

Various research studies (**Blair 2000b; Darling-Hammond 2000; Hanushek 1971**,) reveal that factors such as cognitive ability, subject matter knowledge, knowledge of teaching and learning, licensure, and teaching behaviors in the classroom are related to the performance of the teacher and increased student achievement.

The research conducted by **Bill Sanders**, formerly at the University of Tennessee's Value-Added Research and Assessment Center, has been important in reasserting the importance of the individual teacher on student’s performance. One criteria of his research has been the cumulative effect of teacher impact on student achievement. Over a long period, Sanders studied the difference in the performance of the students under the guidance of teachers of different caliber. He found that when children, were placed with three high-performing teachers, they scored very well but when they were placed with low-performing teachers, their average score fell down who presumably had comparable abilities and skills

A multitude of other studies had proved the already accepted fact that early childhood education is important.

'There's increasing evidences that children gain a lot from going to preschool', says Parents advisor **Kathleen Mc Cartney**, phd, Dean of Harvard Graduate school of Education (**parents.com,why preschool matters**). At preschool they learn to recognize and write numbers, letters and shapes. And more important, they learn how to mingle and adjust with other children."

But this doesn't happen alone- it happens at the hands of preschool teachers. Preschool teachers are in fact the sculptors of the children as they are the one who shape their future. Teachers are skilled in using appropriate methods to develop them conceptually as well as cognitively.

"Teachers effect is everlasting; no one can tell where their influence stops." **Henry Brooks Adams** (American Historian).

Australian research by **John Hattie** suggests that teacher quality accounts for 30 percent of the variance in student's performance. Effective teachers provide

- stimulating environment
- help to weaker students
- consistency and correction
- feedback and goal setting
- encouragement and emotional support
- learning tools and resources
- knowledge and skills
- diagnosis of weaknesses
- 'hand on' learning
- guided questioning
- teamwork opportunities and support
- high expectations and passion for learning.

1.6 EMERGENCE OF THE PROBLEM:

Education is considered indispensible for not only the progress of the individuals, but also for the development of community and nation. It is important to be aware and enhance educational skills to bring about improvements in all

aspects, and to draw benefits of modern and innovative techniques and methods. And the foundation of this skill is generated in the very first few years of child's development. **Rousseau (1972)** in his book **"Emile"** is credited with identifying the period of childhood as important. He described that a child is just not a small or young adult, but in fact going through a unique period in his life. Childhood -a time when, like a flower the child is "unfolding and growing". **Bloom (1964)** in his book **"Stability and Change in Human Characteristic"** has argued that major changes in the personality characteristic are not possible after the child has reached high level of stability **(Shabnam, 2003).** Thus, the major objective in the early childhood stage should be therefore to help children in developing basic concepts which would lead them towards logical reasoning **(Lin, 2002).** It is believed by many researchers that a child starts learning in the womb of the mother. The biggest epic of Hindus 'The Mahabharata' also supports this fact. Who is unaware of brave Abimanyu's episode where he learnt the skill of warfare inside his mother's womb, when his father was narrating the same to his mother. This is the reason the early years and the preprimary education is so important. Preschool education is the education for children before the beginning of mandatory education between the ages of three to six years **(Wikipedia, 2008).**

Many researches have been done in the field of higher education but preprimary education has not been touched enough. Therefore it would be worthwhile to study the factors conducive to the development of preprimary students. The main purpose of this research study is to understand the factors that influence the academic performance of the students in pre-primary schools in India. The main aspects that will be studied in this research are factors influencing the physical, social and cognitive development of the students, parental and associated factors relating to academic achievement and contribution of school factors towards the academic performance of students.

I, being in the teaching profession for last eighteen years, at all levels varying from pre-primary to secondary classes, believe that the institution of education and early childhood educators lay the foundation for lifelong success. They are an important people who play an important role in the child's development by motivating and exposing them to the joy of learning. Children

may forget their teachers of senior classes but the teachers teaching in nursery and KG are always remembered. My own son cherishes the fond memories of his nursery teachers.

I chose this topic to understand the early learning process as the first few years of the child's life are the most crucial ones. The study will give me an opportunity to develop an insight of the important factors that promote the growth of a child physically, socially and intellectually. It would give an opportunity to learn about the specific tools that help a child to develop love for learning. Besides it will be a unique opportunity to learn about the relationships and impact of parents and teachers.

Not only this, the results of the study will form guidelines for government bodies and non-profit organizations to know the needs of children. It will help the educational professionals to provide the best resources, best experiences and ultimately the best education for their students, no matter what financial and social background they come from.

1.7 STATEMENT OF THE PROBLEM :

"A Study Of Factors Conducive To The Development Of Children Studying In Preprimary School."

1.8 OBJECTIVES :

Objectives are the result of some task done. Any organization or an individual does some work with an aim to achieve something desired within a time frame and with limited resources. The result of such a task is the objective. Objectives help the organization to become more attentive and focused on a certain way.

They are also called as aims or the result that an organization wishes to achieve in certain period of time. But objectives are more specific and easier to measure than goals. They help to plan the route of activities using the available resources within the stipulated time. They also help to form the basis for creating policy and evaluating performance. Objectives specify the activities to be executed and present a clear picture of what one is working for.

The reasons why one should set the objectives for any task are as follows:

- Objectives clarify the direction and guides about how to proceed.
- Objectives are the greatest source of inspiration and motivation for the performer. If this drive is missing then the performance will surely be affected.
- Objectives also help to evaluate the performance.

The objectives for the study of this research problem are as follows:

1. To study the physical, cognitive and social development of children studying in urban and rural; govt. and private preprimary schools.
2. To study the effect of curricular and extra-curricular activities; infrastructural facility and classroom environment; and teacher quality on the development of children studying in preprimary schools.
3. To study the inter-relation between physical, cognitive and social development of children studying in urban and rural; govt. and private pre primary schools.

1.9 HYPOTHESIS:

Hypothesis is an assumed proposition of the outcome of any scientific research .It can be said as a predictive statement of the result of the study. It is finding an answer for the given problem. A perfect hypothesis is precise, testable and measurable. It proposes the possible relationship between the independent and dependent variable. It is of two types- Null hypothesis and alternative hypothesis.

To specify the research hypothesis is an essential step in any research study .The various characteristics of writing a hypothesis for a research study are as follows:

- A hypothesis helps to translate the research study and objectives into a clear explanation or prediction of the expected result.
- It provides objectivity to the research activity .It also gives direction to conduct research and provides clear and specific goals to the researcher.
- It is the tentative explanation of the relationship between two variables.
- It establishes the connection between theory and practical, and suggests which type of research is likely to be the most appropriate.
- Hypothesis defines and clarifies concepts. It facilitates objectivity in data

collection and keeps the research free from researcher's judgment.

- Findings of a previous research or real life experiences can also be used to specify the hypothesis.
- Null hypothesis is also called statistical hypothesis which states the existence of no relationship between the independent and dependent variables.

The hypothesis for this research study is as follows:

1. There is no significant difference between the physical, cognitive and social development of children studying in urban and rural; govt. and private preprimary schools.
2. There is no significant effect of curricular and extra-curricular activities; infrastructural facility and classroom environment; and teacher quality on the development of children studying in preprimary schools.
3. There is no significant inter-relation between physical, cognitive and social development of children studying in urban and rural; govt. and private preprimary schools.

1.10 DELIMITATION OF THE STUDY :

1. The study is restricted to Kota division, Rajasthan.

2. The study is delimited to the students of 3-6yrs.

3. The study is delimited to the pre-primary government schools and private schools.

4. The study is delimited to the boys and girls of 3-6 yrs of government school.

5. The study is delimited to the boys and girls of 3-6 yrs of private school.

6. For the sample, 250 students were selected randomly from the 10 Govt. and 10 Private preprimary schools of urban and rural areas under Kota district.

1.11 DEFINITION OF THE TERMS IN THE CONTEXT USED:

Preschool - Preschool is an early childhood program in which children combine learning with play through a method used by professionally trained masters. Preschool is important for the foundation of learning and prepares a child for the next formal school where things would be more academic.

Kindergarten – It literally means a garden for children. It is considered to be their first official school as it gives a substantial amount of overall growth to the child. The kindergarten methods of teaching use different instructional designs to help the learner proceed at his own pace while in a social and collaborative environment. The teaching methods basically involve singing, dancing, drawing, coloring and social interaction as a part of the transition from home to school.

Conducive – It means helpful or to make something possible. It means to create a situation or outcome likely or possible.

Cognitive development- Here we are talking about the cognitive development of a child. It means the way children think, explore and work things out. It includes acquisition of knowledge, skills, problem solving and dispositions, which help children to think about and understand the world around them.

Physical development- Our study concerns the child of 3-6yrs. The physical development of a child includes both growth and the ability to use muscles and body parts for particular skills which a child learns by a certain age. It varies from child to child depending on several factors. Some of the gross motor skills that mark the development of a child are running, jumping, throwing, climbing, kicking, skipping etc.

Social development – Social development means socialization of a child. It is the process by which a child learns to interact with others around them. With their growth they start recognizing their individuality in their community and gain skills to communicate with other people and process their actions. Social development has a great impact on a child's development. It helps a child's language skills.

Motor development-Motor development is the growth and development of a child's bones, muscles and ability to move and touch the surrounding. Fine motor

skills include minute movements in the hands, wrists, fingers, feet, toes, lips and tongue. Gross motor skills are larger movements made by child with arms, legs, feet or entire body. Motor development in the three to six years should include running, jumping, early throwing and kicking.

Amenities – The little things that are required to make life comfortable or the basic requirements are called amenities. They are the elements of comfort and convenience. Here we have used them in terms of school campus.

Infrastructure –It refers to fundamental and basic facilities including other installations which help the organization to work smoothly and efficiently. The infrastructure of pre-primary school plays a vital role in achieving the expectations with which a child is put in a school.

Curricular activities – Curricular activities are the activities encompassing the prescribed course of study.

Extra-curricular –Various social and other types of activities like dance , drama, debate, sports etc. which attracted the attention of the child were considered as the extracurricular activities.

Personality- Personality is defined as the set of behavior, cognitions and emotional patterns that develop from biological and environmental factors. It makes the individual different and unique from others. “Personality is the dynamic organization within the individual of those psycho-physical systems that determine his unique adjustment to his environment.” **Gordon W. Allport**.

Classroom environment- Classroom environment means classroom surrounding, the classroom climate or the social climate. It means the physical and the emotional aspect of a classroom.

Community- Community means a group of living things that share common factors like religion, values, social norms, customs, identity and most important a sense of place situated in a given geographical area. It can be called a social unit.

Academic performance- Academic achievement is an academic performance. It is the extent to which a student, teacher or institution has attained their short or long term educational goals. Generally academic performance refers to the performance in various subject areas or acquisition of knowledge of different domains of learning.

1.12 PLANNING FOR PRESENTATION OF RESEARCH REPORT:

The research study consists of the following chapters.

CHAPTER -1 INTRODUCTION

This chapter deals with the introduction of the study, background, emergence of the problem, statement of the problem, objectives and hypothesis, delimitations of the study, definitions of the terms used and planning.

CHAPTER-2 REVIEW OF THE LITERATURE

This chapter includes the introduction, meaning and importance of review of literature, objectives and purpose of the review of literature, the list of sources of literature, researches conducted in foreign countries and Indian researches, emerging points and the conclusion.

CHAPTER-3 RESEARCH METHODOLOGY

This chapter deals with the methodology of the study, introduction, definition of method, tools and techniques, population, method of the selection of the sample and the tools used in the study.

CHAPTER-4 DATA ANALYSIS AND INTERPRETATION

This chapter deals with empirical analysis and interpretation concerning objectives 1, 2 and 3.

CHAPTER-5 CONCLUSION, SUMMARY AND RECOMMENDATIONS

This chapter deals with Discussion, Conclusion and Recommendations for the study. Each hypothesis is taken and the results were discussed in depth with the support of the earlier researches. Conclusions were drawn of the study and future line of study was also recommended.

CHAPTER – 2

REVIEW OF LITERATURE

CHAPTER - 2
REVIEW OF LITERATURE

2.1 INTRODUCTION:

The survey of related literature means locating, reading and evaluating report of research as well as reports of casual observation and opinion that are related to the investigator's planned research. The survey of related literature incorporates review of the literature .The term '**Review of the literature'** consists of two words: Review and Literature. In research the term **'literature'** refers to the knowledge of a specific area of investigation which includes theoretical, practical and research studies .It prepares the ground for the researcher to proceed in the right direction with sufficient previous knowledge. It also avoids unnecessary repetition of the work that has already been accomplished.

The term **'review'** means organizing the knowledge to evolve an edifice of the knowledge so that the researcher is able to add on to the previous studies.

Review of Literature refers to the survey of books, articles, journals, newspapers and other sources to acquire more knowledge about the problem under investigation. This process is planned to pave the way further for the researcher by gaining from other's experience and also to demonstrate that how the research is relevant within a larger field of study.

2.2 DEFINITIONS OF REVIEW OF THE LITERATURE:

Fox, D.J. (1969)-

"Every research project should be based on all of the relevant thinking and research that preceded it. When completed, becomes part of the accumulated knowledge in the field and so contributes to thinking and research that follows."

Borg, W. R. (1978)-

"The key to the huge store house of published literature opens door to the source of significant problems and the elaborative, explanatory hypotheses provide helpful orientation for definition of the problem, selection of method, and

comparative data for analysis of results. A lot of critical and analytic reading that provides a good stimulus to mind is required for being original and creative."

Brog, W. R. (1978)-

"The review of literature forms the firm foundation upon which all future work can be built. If we fail to do so then our work will miss novelty and will often be duplicate work that has already been done better by someone else."

Best J.W. (1978)-

"Books and libraries contain all human knowledge. Man develops from the accumulated and recorded knowledge of the past. He constantly adds to the vast store of knowledge of the past progress in all areas of human endeavour."

In research, the literature is reviewed to create the context from the past for the new study to be conducted with subject and newly gathered data.

The analytical feature of literature review may give a new understanding of old material or combine new matter with old interpretations and can trace the intellectual progression of the field

2.3 OBJECTIVES OF REVIEW OF THE LITERATURE :

Objectives are specific, measurable and identifiable goals towards which activities are directed. They are the guiding mileposts for the performer to proceed on the right way. They are also the end point of the performer's operations. They are the real standards against which actual performance can be measured. They are essential as they change vision into clear-cut measurable targets.

(a) To provide theories, explanations and hypothesis valuable in reformulating the problem.

(b) To suggest research methods appropriate to the problem.

(c) To place each work in the context of its contribution to understanding the research problem being studied.

(d) To locate the comparative data useful in the interpretation of the results.

(e) It suggests method, procedure, sources of data and statistical techniques appropriate to the solution of the problem.

(f) To locate our own research within the context of existing literature.

(g) It describes how the proposed research is related to prior research in statistics.

(h) It shows the originality and relevance of your research problem. Specifically, your research is different from other statisticians.

2.4 PRINCIPLES AND PROCEDURE FOR REVIEW OF THE LITERATURE:

(a) It is advised to get first view by consulting general sources, such as text-books which provide the meaning and nature of the concepts and variables.

(b) After developing general insight of the problem, the investigator should review the empirical researches related to the problem.

(c) The review of research material must be systematic and deep.

(d) The investigator should take complete, systematic and accurate notes.

(e) An important pre-requisite for effective use of library for review is the ability to read at a good speed. This can be achieved only through practice.

2.5 SOURCES OF REVIEW OF THE LITERATURE :

The sources of Review of the Literature are as follows:

(a) Books and text books.

(b) Periodicals.

(c) Abstract.

(d) Encyclopedias.

(e) Almanacs, handbooks, yearbooks.

(f) Dissertations and Thesis.

(g) Dictionaries.

(h) ERIC (Educational Research Information Centre).

(i) Internet.

(j) News paper and Magazines.

2.6 REVIEW OF LITERATURE RELATED TO THIS RESEARCH PROBLEM:

I have categorized the review of literature related to my research problem "A study of factors affecting the physical, social and cognitive development of students studying in the pre-primary schools" into two parts --studies conducted in abroad and in India.

STUDIES CONDUCTED ABROAD

Wenglinsky Harold, (Sep 2001)[1] 1-19 Statistics & Research Division ,Princeton,US

'Classroom Practices and Student Performance: How Schools Can Make a Difference'

The current study explores the link between classroom practices and student academic performance. The study finds that the effects of classroom practices, when added to those of other teacher characteristics, are comparable in size to those of student background, suggesting that teachers can contribute as much to student learning as the students themselves.

Bester g. and Budhani r.s., (Jan 2001)[2] South African Journal of Education21(4):330-335)

'Social Isolation: a learning obstacle in the primary school'

The aim of the research study was to determine the relationship between social isolation and academic achievement at primary school level and to determine which factors relate to social isolation in general. A sample of 180 primary school learners from three primary schools was used in the investigation. Academic achievement, loneliness, self-esteem, psychological wellbeing, perceived physical ability and physical attractiveness were measured. As much as 29% of the variance in academic achievement can be explained by social isolation making it an important variable when academic achievement is predicted at primary school level. Negative correlations were found between social isolation and all the other variables, especially self-esteem ($r = –0.81$; $p < 0.01$).

Crozier W.Ray (2003)[3] School of Social Sciences, Cardiff University, UK

'Shyness in the classroom'

Research has shown that shy students participate less frequently in class, are less likely to volunteer contributions, and give shorter and less elaborate answers to questions. Differences between shy and less shy children extend to their performance on standardized tests of vocabulary. The findings of two studies undertaken in British schools are presented; in each study participants were rated for shyness by their class teachers. The first study (of 10-year-olds) found that shy children's test performance was influenced by the form of the test - they performed less well when the test was administered individually relative to the same test being administered to the whole class in a group setting. A second study asked children (aged 5-9 years) to sort and describe a set of pictures. The stories of shy children were briefer with shorter mean length of utterances and less linguistic diversity, and this difference was obtained even when the influence of vocabulary test scores was statistically controlled. The findings suggest that shy children's responses are constrained by their concerns about evaluation and do not necessarily reflect underlying differences in competence.

Simovska V. (1 April 2004)[4] Health Education Research, Volume 19, Issue 2,pg 198-207

'Student participation: a democratic education perspective—experience from the health-promoting schools in Macedonia'

The paper addresses the issue of student participation from the perspective of the health-promoting schools initiative. It draws an experience from the Macedonian Network of Health-Promoting Schools and its collaboration with the Danish as well as other country networks within the European Network of Health-Promoting Schools. Student participation is viewed as one of the main focal points of the conceptual framework and model of a health-promoting school developed within the Macedonian context. This model and the model distinguishing between two different qualities of participation—genuine and token participation—are presented and discussed in the paper. Underpinning values that these models endorse as important for the processes of health promotion in

schools include self□determination, participation, democracy, diversity and equity.

Turano Amy A. (7Jan 2005)[5] College of Education, Rowan University,US

'The impact of classroom environment on student learning .'

This thesis discusses the four major factors of classroom environment: physical environment, time and instructional management, behavior management, and teacher effectiveness. A goal of this study is to contribute to teacher knowledge about how classroom environments impact student learning. A resource center and a first grade classroom were observed and the teachers of both classes were asked to complete a self-evaluation of their classroom's environment. Both teachers were found to have classroom environments that were conducive to learning.

Bucholz. Jessica L. (2009)[6] University of West Georgia and Sheffler Julie L. Florida Atlantic University **,**US

'Creating a Warm and Inclusive Classroom Environment: Planning for All Children to Feel Welcome'

The type of classroom environment that a teacher creates and encourages can either increase or decrease a student's ability to learn and feel comfortable as a member of the class. The classroom environment should do as much to foster cooperation and acceptance as the teaching methods that the teacher uses. This article describes a number of methods to help teachers plan for and create a classroom that welcomes and supports all children. At the beginning of the year teachers have the goal of establishing a classroom environment that is favorable for helping all students work cooperatively in order to learn. The classroom environment can either improve or impede a student's ability to learn and feel safe and comfortable as a member of the class. Classrooms that encourage emotional well-being create an atmosphere for both learning and emotional development. Educational research supports creating an atmosphere of mutual respect, where students feel relaxed in asking questions and expressing thoughts and feelings (Stronge, 2002). Some areas to consider when creating an atmosphere of mutual

respect are classroom design, classroom procedures, and classroom strategies. Implementing a few strategies that address these areas can help develop a strong sense of community and encourage positive interactions and cooperative learning for students with and without disabilities. A warm classroom environment can lead to increased academic achievement and a sense of pride and belonging in the school.

Adams Nan B., DeVaney Thomas A. & Sawyer Susan G.(2009)[7] The Journal of Technology…2009-ejournals.bc.edu

'**Measuring Conditions Conducive to Knowledge Development in Virtual Learning Environments: Initial Development of a Model-Based Survey'**

The premise of this model is the belief that good teaching and engaged learning should not be determined by the use of certain instructional tools but by the guiding principal that learning is an active and recursive process, where knowledge must be contextualized to be relevant to the learner. To this purpose, this article describes the initial development in the ongoing process of designing a valid and reliable assessment tool, the Virtual Learning Environment Survey – VLES, for exploring the degree to which the Recursive Model for Knowledge Development relates to effective design of online learning environments. This student self-report survey will seek to provide guidance for the assessment of online learning environments through collection of student perceptions of teaching strategies, knowledge approach, and knowledge ownership in online classrooms.

Wilson Nikki (MAY 2009)[8] The Graduate School, Univ. of Wisconsin-Stout,US

'Impact of Extracurricular Activities on Students'

The study concluded that students who participate in extracurricular activities generally benefit from the many opportunities afforded to them. Benefits of participating in extracurricular activities included having better grades, having higher standardized test scores and higher educational attainment, attending school more regularly, and having higher self-concept. Participants in

out-of-school activities often learned skills such as teamwork and leadership while decreasing the likelihood of alcohol use and illicit drug use and related problem behaviors. Those who participate in out-of-school activities often have higher grade point averages, a decrease in absenteeism, and an increased connectedness to the school. When balanced with academic learning, extracurricular activities may help students raise self-esteem, develop school spirit and connect with the adults in the community in a positive manner creating a good situation for all.

Sheridan Susan M., Edwards Carolyn Pope, Marvin Christine A, and Knoche Lisa L. (2009)(9)

Early Education and Development, Volume 20, Issue 3 ‘

Professional Development in Early Childhood Programs: Process Issues and Research Needs’

This paper offers research directions associated with the processes underlying professional development, including areas in need of investigation that can inform the early childhood education field in terms of how professional development efforts exert their influence and produce meaningful change in practitioners’ skills, behaviors, and dispositions. The paper highlights representative research from the professional development literature on its various forms/approaches and offers an agenda for research on the professional development process. Broad issues associated with the conduct of research on professional development, including considerations of professional development processes, participant characteristics, relationships, and sustainability are discussed.

Bullard J.(2010)[(10)] Univ. of Montana Western,US

‘Why is the Environment Important for Children's Learning?’

The environment we are in affects our moods, ability to form relationships, effectiveness in work or play—even our health. In addition, the early childhood group environment has a very crucial role in children’s learning and development for two important reasons.

First, young children are in the process of rapid brain development. In the early years, the brain develops more synapses or connections than it can possibly use. Those that are used by the child form strong connections, while the synapses that are not used are pruned away. Children's experiences help to make this determination. The National Scientific Council of the Developing Child compares the development of the brain to constructing a house stating, "Just as a lack of the right materials can result in blueprints that change, the lack of appropriate experiences can lead to alterations in genetic plans." They further state, "Building more advanced cognitive, social, and emotional skills on a weak initial foundation of brain architecture is far more difficult and less effective than getting things right from the beginning" (2007, p. 1). Because children's experiences are limited by their surroundings, the environment we provide for them has a crucial impact on the way the child's brain develops (Strong-Wilson & Ellis, 2007, p. 43).

Ndani Mary N. and Kimani Elishiba n.(2010)[(11)] African Journal of Teacher Education, October 2010

'Factors influencing early childhood development. Teachers' motivation in Thika district, Kenya'

The study stated that Early Childhood Development (ECD) centers comprise one of the immediate social and physical environments influencing children's development, that Bronfenbrenner (1986, 1989) terms Microsystems. The Microsystems are made up of personal qualities of the people therein (particularly teachers) and the physical environments. In order for ECD centers to provide the necessary conditions for children's holistic development, teachers should be well motivated and physical facilities conducive for working and learning. The sample of the study was comprised of 40 ECD centers and 46 ECD teachers. Preschool Teachers' Motivation Questionnaire and an observation checklist were used to collect the primary data. Secondary data were obtained from various records in the ECD centers. Among the key findings was the revelation that the motivation levels of more than 50% of the teachers were below average. The study recommended that the Ministry of Education and communities

work together to improve ECD teachers' terms and conditions of service as well as the learning/teaching environment.

Fasina, (March 2011)[12] Global Journal of Human Social Science, Vol. 11, Issue2, Version 1.0 pp 44-51

'**The Role of Parents in Early Childhood Education: A Case Study of Ikeja, Lagos State, Nigeria '**

This research aims at providing solutions to role of parents in early childhood education in Nigeria. It will serve as an eye opener to parents and the society in helping to modify or re-adjust their mode of parental involvement towards achieving a better future for themselves and their children notwithstanding their busy schedules and in some cases, inadequacy of resources. A survey approach was used through self- administered questionnaires, and analysis was done using Analysis of Variance (ANOVA) to test the hypothesis. Based on the findings of this work, parental involvement, that is emotional care and support has a very big influence on early childhood education, particularly the academic performance of the child. More so, it was observed that the extent of parental educational attainment has a significant influence on the age which the child is being sent to school. This implies that the extent or level of the parental educational attainment and exposure determines the age at which the child is being enrolled to school. It was also discovered that, the residential setting of the parents (respondents) has nothing to do with the educational performance of the child. On the whole, parental involvement is very essential in early childhood education and this helps to broaden the child's horizon, enhance social relationships, and promote a sense of self-esteem and self-efficacy .

Murtaza Khush Funer (9Oct 2011)[13] Aga Khan University,Pakistan

'Developing child friendly environment in early childhood education classrooms in Pakistan (Article)'

Among all levels of education, Early Childhood Education and Development (ECEd) is considered to be the most critical level for social (relationship to others), emotional (self-image and security), cognitive (thinking

and reasoning) and physical development of children. Therefore, the teachers of early years need to play a significant role in the teaching and learning process through providing a friendly environment in their schools. The study employed a case study approach. Information was gathered through a combination of methods, which included classroom observations, field notes, document analysis, focus group and semi structured interviews. The focus group participants and the interviewees were selected from a variety of stakeholders, which included parents, students, teachers and head teachers from public sector to get a comprehensive and representative analysis. Informal conversations with different stakeholders and self reflections contributed to clarify different aspects of the issues and findings. The study explored teachers' role in developing child friendly environment in ECE classrooms. Thus, two female ECE classroom teachers from a public secondary school in Gilgit-Baltistan of Pakistan were the primary participants of the study and they taught in early setup. The study revealed that institutional support and monitoring teachers' personal propensity to learning for improving pupils' learning, the prior ECED learning experiences and pedagogical content knowledge play an important role in engaging teachers in developing their thinking and teaching practice. The contribution of this thesis is that institutional and socio cultural influences are local, and derive from the Pakistani context, so have a particular significance for designing teacher development programs

Waldfoge Jane (2012)[(14)] Columbia Univ. School of Social Work, USA. (Article- future child fall 2012;22(2):39-54)

'The Role of Out-of-School Factors in the Literacy Problem'

When U.S. children enter school, their reading skills vary widely by their socioeconomic status, race and ethnicity, and immigrant status. Because these literacy gaps exist before children enter school, observes Jane Waldfogel, the disparities must arise from conditions outside of schools— from the children's families and communities. For instance, differences in parenting help explain black-white literacy gaps as well as gaps associated with socioeconomic status. Other factors differ by group. For instance, key influences on early literacy for

immigrant children are the language spoken at home, parental proficiency in English, and whether a child participates in preschool.

Waldfogel concludes that addressing early literacy gaps, and later gaps, requires tailoring policy responses depending on which group is being targeted. But across all groups, one important conclusion holds. Although out-of-school factors contribute—sometimes in major ways—to literacy disparities, says Waldfogel, schools have a responsibility to try to close such gaps. Research on the out-of-school sources of literacy problems can support schools in this effort by helping practitioners and policy makers better understand which children are likely to encounter problems in literacy and why, as well as what schools and others can do to address those problems.

Murugi,Oyamo J (2013)[(15)] Univ. of Nairobi , Kenya

'Factors influencing participation of children in the early childhood development education programme; A case of Bungoma South District, Bungoma County-Kenya'

The purpose of the study was to investigate factors influencing participation of children in the ECDE programme in Bungoma South District. This study aimed at achieving the following objectives: - to examine the influence of common ailments, ECDE teachers satisfaction, school feeding programmes and parents' literacy levels on participation of children in the ECDE programme. Participation in the study included: enrolment, attendance, and transition to primary school by ECDE children. The study had the following conclusions: first, ECDE centres' enrollment was too high compared to available facilities thus creating conditions for easy spread of infections. Secondly, ECDE teachers' motivation was low mainly because of poor remuneration and poor school infrastructure. Thirdly, SFP was very important in enhancing participation in ECDE. Fourthly, the semi-illiterate and poor parents had limited capacity to support ECDE services compared to their literate wealthy counterparts. The study recommends that economic empowerment strategies should be employed to communities to enable them afford better nutrition and adequate sanitary facilities for their children. The study suggested that further research be carried out to

establish why there are more children in standard 1 than those who graduated from ECDE the previous year in Bungoma South District and to establish differences in developmental dimensions between children who attended pre-school and those who did not at the lower primary level.

Kainuwa A. and Binti Mohammad Y. N (2013)[16] International Journal of Scientific and research Publications, Volume 3,Issue 10

‘ Influence of Socio-Economic and Educational Background of Parents on their Children’s Education in Nigeria ’

This conceptual paper studies the influence of parent‟s socio-economic status and educational background on their children‟s education in Nigeria. The discussion in the paper is base on the theoretical framework of conflict theory. This theory is appropriate for the study because it allows the reader to understand how children‟s education is significantly affected by the socio-economic status and educational background of their parents. Finally, Suggestions for parents on how to overcome personal and economic challenges and to help in the Educational process of their children were presented. Conclusions from the literature were drawn, and the paper concludes that Parents‟ educational and socio- economic backgrounds influenced the Education of their children.

WANJAU FG (2013)[19] Univ. of Nairobi, Kenya

‘**An evaluation of the factors that affect implementation of pre-school ’**

The purpose of this study was to investigate influence of immediate preschool enrolment on curriculum implementation in public preschools in Mirangine district, Nyandarua County. Three research questions were formulated to guide the study. These included investigation on parent’s role in preschool curriculum in Mirangine district Nyandarua County. The research also examined the preschool teacher’s role in the curriculum implementation. Further the research investigated the role of infrastructure in the curriculum implementation. The study established that many parents felt that financial support was the most important contribution in their children’s curriculum implementation. It was also established that “High cost” preschool parents motivated their children curriculum

implementation more than “low cost “school parents. The curriculum further established that the major role of the preschool teacher was to enable the child socialize with peer. Sharing of teaching/learning resources enabled children to effectively socialize with his/her environment. The nature, quality and quantity of the preschool dictated among others teaching approach/methodology. Group activities were seen to be quite popular when classrooms had adequate space. Based on the findings it is recommended that the number of toilets in preschools be increased because young children are more frequent in toileting than older children and thus need of minimizing queuing period. The research further saw the need of accompanying children to and from school. The study recommends a research be done on academic performance of pupils (in primary) who have undergone preschool education and those who have not. Further study should be done on influence of period (number of years) of preschooling on primary education

Dr. Korir D K. (2014)[20] Journal of Education and Practice, Vol 5, (No 11)
‘The Impact of School Environment and Peer Influences on Students’ Academic Performance in Vihiga County, Kenya’

The study examined the impact of school environment and peer influence on the students’ academic performance. The study assessed school environment factors and peer influences in terms of the level of psychological impact they have on learners. The study was based on Albert Bandura’s Social Learning Theory, which considers leaning as an interaction between environment, behaviour, and one’s psychological processes. The study used a correlation research design where school environment and peer influence constituted the independent variables whereas students’s academic performance was the dependent variable. Twenty-one public secondary schools in Sabatia District of Vihiga County were used in the study. The study subjects were selected using simple random sampling technique. Questionnaires were used to collect data on the school environment and the peer influence and school records were used to obtain students’ academic performance. Data were analyzed using multiple regressions. The study established that school environment and peer influence made significant

contribution to the students' academic performance. It is hoped that the findings of this study will be useful to teachers, principals and parents to gain more insight into the psychosocial factors that affect students' academic performance.

Cheryan Sapna, Ziegler Sianna A. , Plaut Victoria C. , and Andrew N. Meltzoff1 Andrew N (2014)[21] SAGE Journals, USA

'Designing Classrooms to Maximize Student Achievement'

Improving student achievement is vital for our nation's competitiveness. Scientific research shows how the physical classroom environment influences student achievement. Two findings are key: First, the building's structural facilities profoundly influence learning. Inadequate lighting, noise, low air quality, and deficient heating in the classroom are significantly related to worse student achievement. Over half of U.S. schools have inadequate structural facilities, and students of color and lower income students are more likely to attend schools with inadequate structural facilities. Second, scientific studies reveal the unexpected importance of a classroom's symbolic features, such as objects and wall décor, in influencing student learning and achievement in that environment. Symbols inform students whether they are valued learners and belong within the classroom, with far-reaching consequences for students' educational choices and achievement.

Abolarin, Dr (Mrs.) Elizabeth Ebun (2014)[22] Department of educational psychology/ guidance and counsellingFct, coe zuba (IOSR-JRME)

The Influence of Prenatal, Home and Environmental factors on Learning Outcomes of Pre-Primary School Children (IOSR-JRME)

The positive influence of early childhood education on school readiness and the rise in maternal employment have made pre-primary education a norm in many nations, Nigeria inclusive. Most children of 2 to 5 years, especially of working mothers, attend a regulated early education service in Nigeria (Abolarin, 2014). Pre-school services play an important role in child development by giving children an opportunity to engage in a range of educational and social activities. Moreover, pre-school education could have positive influences in children's

affective, conceptual and social development in subsequent years (Gormley, Gaver, Phillips & Dawson, 2005). Inspite of these positive influences, various emotional, adjustment and academic problems are noticed in pre-school pupils (Tombowa, 2013).

Patricia Brady Gablinske (2014) [(23)] University of Rhode Island, UK

A case study of student and teacher relationships and the effect on student learning

This research study explored the affective domain of teacher-student relationships using a single case study design. This single case study produced a synthesis of information that guides a classroom teacher in the development and maintenance of her relationships with her students. The resulting analysis and interpretation provided a description of major themes that developed regarding strong teacher student relationships, as well as, specific components to the interactions considered essential for the student's learning environment. The outcome of this study is an account of experiences and procedures that guide the development and maintenance of relationships between a teacher and her students. Based on the findings, four primary categories emerged with supporting elements that were critical components of each category. These four primary categories represent an interpersonal framework for the learning environment. The qualitative method in this study is derived from a constructivist viewpoint with a focus on deeply understanding this specific case of teacher-student relationships. The goal in conducting this study was to provide more specific examples of and empirical findings for how teacher-student relationships are created. Identifying specific factors associated with teacher-student interactions could provide valuable information to an educational learning community. Implications for how these findings can impact the learning environment are discussed.

Suleman Qaiser (2014)[24] International Journal of Learning and Development

Effects of Classroom Physical Environment on the Academic Achievement Scores of Secondary School Students in Kohat Division, Pakistan

The purpose of the paper was to examine the effects of classroom physical environment on the academic achievement scores of secondary school students. The study concluded that classroom favorable environment has a significant positive effect on the academic achievement scores of secondary school students. The students of experimental group showed better performance as compared to the students of control group. Based on findings, it was recommended that classroom physical environment should be well-organized, equipped and facilitated.

Herrador Zaida, Sordo Luis and Custodio Estefania (29sep2014)[25] PloS ONE 9(9):e105880.doi:10.1371/journal.pone.0105880

'Cross-Sectional Study of Malnutrition and Associated Factors among School Aged Children in Rural and Urban Settings of Fogera and Libo Kemkem Districts, Ethiopia ,South Africa'

This study describes the prevalence of stunting and thinness and their related factors in Libo Kemkem and Fogera, Amhara Regional State and assesses differences between urban and rural areas.In this cross-sectional study, anthropometrics and individual and household characteristics data were collected from 886 children. Height-for-age z-score for stunting and body-mass-index-for-age z-score for thinness were computed. Dietary data were collected through a 24-hour recall. Bivariate and backward stepwise multivariable statistical methods were employed to assess malnutrition-associated factors in rural and urban communities.

The prevalence of stunting among school-aged children was 42.7% in rural areas and 29.2% in urban areas, while the corresponding figures for thinness were 21.6% and 20.8%. Age differences were significant in both strata. In the rural setting, fever in the previous 2 weeks , consumption of food from animal sources and consumption of the family's own cattle products, among others factors were significantly associated with stunting, while in the urban setting, only

and years of schooling of the person in charge of food preparation were significant .

The prevalence of stunting was significantly higher in rural areas, whereas no significant differences were observed for thinness. Various factors were associated with one or both types of malnutrition, and varied by type of setting. To effectively tackle malnutrition, nutritional programs should be oriented to local needs.

MICHAEL ALFRED (June 2014)[(26)] Associate professor, Curtin Univ., Australia AHURI Research and Policy Bulletin

‘ What impact does a child’s housing have on their development and wellbeing?’

The main findings of this research are -

• The statistical links between aspects of young children’s housing and their wellbeing outcomes were quite modest.

• Housing played a small though significant role in shaping outcomes of children’s physical health. Living on a farm or in a more liveable neighbourhood also contributed to better physical health.

• Children’s social and emotional outcomes were mostly affected by housing variables that adversely affect the quality of relationships—such as frequent moves, renting rather than owning and being in financial stress.

• Crowding had the largest negative impact on children’s learning outcomes.

• Urban planning that featured parks, playgrounds and other open areas was likely to be conducive to children’s development and wellbeing even if achieved at the expense of a higher density of actual dwellings.

• The children of sole parents and Indigenous Australians were particularly affected by their inferior housing positions. There is a case for closer targeting of existing housing assistance programs for these groups and the development of forms of assistance that address their particular needs.

Borghans Lex, Golsteyn Bart H.H and Zolitz Ulf (2015)(27) Published: July 16, 201 https://doi.org/10.1371/journal.pone.0129700

'School Quality and the Development of Cognitive Skills between Age Four and Six'

This paper studies the extent to which young children develop their cognitive ability in high and low quality schools. We use a representative panel data set containing cognitive test scores of 4-6 year olds in Dutch schools. School quality is measured by the school's average achievement test score at age 12. The results indicate that children in high-quality schools develop their skills substantially faster than those in low-quality schools. The results remain robust to the inclusion of initial ability, parental background, and neighborhood controls. Moreover, using proximity to higher-achieving schools as an instrument for school choice corroborates the results. The robustness of the results points toward a causal interpretation, although it is not possible to erase all doubt about unobserved confounding factors.

Kafyulilo Ayoub, Fisser Petra and Voogt Joke (May 2015)[(28)] Univ. of Dar es Salaam. Article in Education and Information Technologies 21(6). May 2015

'Factors affecting teachers' continuation of technology use in teaching'

This study was conducted to investigate the continuation of technology use in science and mathematics teaching of the teachers who attended a professional development program between 2010 and 2012. Findings showed that the continuation of technology use differed for the teachers involved in the professional development program. While all teachers reported to have gained knowledge and skills through the professional development program and were positive about technology use in education, only some teachers continued the use of technology. The data revealed that despite the challenges that all teachers in the sample encountered when using technology in their teaching (such as large classrooms, problems with electricity supply, lack of time and lack of technology tools), the encouragement of school management was a critical factor in teachers' continuation of technology use. Implications of the findings are discussed.

Shu Hui NG Melanie (2015)[29]

'Factors Influencing the Success of Inclusive Practices in Singaporean Schools : Shadow Teachers' Perspectives'

The main purpose of this study was to examine shadow teachers' experiences and to explore the factors influencing the implementation of inclusive practices in Singaporean schools. In particular, the factors under investigation in this study were child characteristics, teacher characteristics (such as awareness and knowledge about inclusive practices, background & training, attitudes towards inclusion, as well as understanding and perception of role) and collaboration with mainstream teachers, parents and other important parties. The findings indicated that insufficient collaboration (in particular with the mainstream teachers and the school) negatively impacted the success of inclusive practices. Another factor that was found to have a large impact on the implementation of inclusive practices was a lack of awareness and knowledge. Data from the study indicated that most of the factors were interdependent and worked hand-in-hand to contribute to the success or failure of inclusive policies. Other challenges which emerged from the data were teacher responsibility, tension among authority figures, and large class sizes posing a barrier to inclusion. It was suggested that raising awareness and provided training to teachers and schools would greatly aid the process of moving towards more inclusive schools. Teachers need to be persuaded that inclusion is beneficial to all pupils. Schools would also benefit from an increase in manpower (teachers and special needs personnel) and smaller class sizes.

check

Pem Deki (2016)[30] Faculty of Nursing and Public Health, Khesar Gyalpo University of Medical Sciences of Bhutan , Journal of Advanced Practices in Nursing

'Factors Affecting Early Childhood Growth and Development: Golden 1000 Days'

The paper concluded that globally, more than 200 million children under five years fail to reach their potential in cognitive and social development due to

poverty, poor health, malnutrition, and deficit care. The prevalence rate of cognitive development problem in Bhutan is 15%, 33.5% of children less than five years are stunted and 9.9% of infants are born with low weight of less than 2,500 grams. Five main factors identified in contributing to growth and developments at early childhood are nutrition, parent's behaviours, parenting, social and cultural practices, and environment. Understanding the extent and magnitude of these problems especially within 1000 days of child includes from the date of conception till the child attends 2 years of age is very important. If timely interventions are taken within this critical period, the problems are reversible and will gain maximum benefits. A healthy child especially within this age will have better cognition and learning capabilities, and consequently have impact on social, economic, physical and cognition. Therefore, healthy children within 1000 days will lay the foundation for nurturing bright school children, healthy and productive adulthood thus will promote Gross National Happiness of the country.

Khan Deborah S. (2016)[31] *The Univ. Of The West Indies*

'The Transition Pre-school to Primary School'

Good early childhood care and education has strong, long lasting, positive effects on children's development (Hendrick & Weismann, 2010). Early learning experiences have a decisive impact on how children function as adults and subsequently on how they affect society. Positive experiences and warm responsive care can enhance brain development. Negative experiences can do the opposite. During these formative years, there are prime times for acquiring different kinds of knowledge and skills.

Early childhood care and education is defined as group settings deliberately intended to affect children from birth to eight years of age (Gordon & Browne, 2011). In the context of this paper, the settings referred to begin with preschool, which caters for children three to five years of age and continues to the primary school through the kindergarten or the infant department. The transition between these two institutions is very significant.

As children move from preschool to primary school, many are able to easily navigate the change but for some it can be quite daunting (Skouteris, 2012). This experience is perceived to have long term effects on their future development and learning, extending through all subsequent levels of education. Successful transitions enable children to adapt to new settings where they quickly grasp teaching and learning methods, the processes, rules and regulations which will enhance their performance in school.

Vasandani Sonu (21 Jan 2016)[32] Founder & CEO at Sunshine Teachers' Training

'How preschool environment affect children's stress levels and what to do about it...)' www.linkedin.COM

It has long been understood that there is a relationship between children's behaviour and the physical environment of their classroom. Now researchers have scientific evidence . They have measured the stress levels of children at home and in preschool settings, specifically cortisol levels. Cortisol is a natural hormone that our bodies secrete and it has often been referred to as the "stress hormone." It has been ruled out that the increase of the cortisol level has anything to do with the children's separation from their parents (Dettling et al., 2000). Increasingly, studies indicate that the rise is caused by environmental factors present in the school setting. Further, studies have shown that colour, lighting, sound and noise, temperature, and physical space (both vertical and horizontal) affect children's stress levels. This, in turn, affects their cognitive development, learning, and behaviour.

Being mindful of the amount of stimulation the physical environment provides, Weinstein (1987) believes that children should be exposed to environments that are bright as well as dim, small and cosy as well as large and open, and noisy as well as quiet, for their sensory stimulation. This allows children to make sense of the world they live in.

An aesthetically-pleasing environment helps children to feel secure and relaxed, reducing stress levels to enable their healthy holistic development and the

development of positive behaviours that we value such as cooperation and persistence.

Maimela (1Sep 2016)[33]

IOSR Journal of Humanities And Social Science (IOSR-JHSS) Volume 21, Issue9

'Factors That Influence the Performance of Students in Botswana Primary Schools'

The purpose of the study was to investigate factors that influenced student's performance in Primary School Leaving Examinations.

A mixed-method design allowed the researcher to triangulate data from the professional literature and a questionnaire comprised of closed and open-ended questions.

For the closed ended section of the questionnaire, SPSS (Statistical Package for the Social Sciences) software was used. Data from the interviews and open-ended section of the questionnaire was coded, and then emerging patterns and themes were identified and described in order to understand the meanings of these categories from the perspectives of the respondents . The findings show that a myriad of factors contribute to the academic performance of the learner in Primary School Leaving Examination (PSLE): parental involvement, medium of instruction, teaching and learning materials, infrastructure, learner – teacher ratio, school libraries, motivation of teachers, qualification of teachers and learners" discipline.

Masino Serena and Niño-Zarazúa Miguel (2016)[34] International Journal of Educational Development

'What works to improve the quality of student learning in developing countries?'

The article reviewed a systematic review to identify policy interventions that improve education quality and student learning in developing countries. Relying on a theory of change typology, we highlight three main drivers of change of education quality: (1) supply-side capability interventions that operate through the provision of physical and human resources, and learning materials; (2)

policies that through incentives seek to influence behaviour and intertemporal preferences of teachers, households, and students; (3) bottom-up and top-down participatory and community management interventions, which operate through decentralisation reforms, knowledge diffusion, and increased community participation in the management of education systems.

Overall, the findings suggest that interventions are more effective at improving student performance and learning when social norms and intertemporal choices are factored in the design of education policies, and when two or more drivers of change are combined. Thus, supply-side interventions alone are less effective than when complemented by community participation or incentives that shift preferences and behaviours.

Goss Peter and Sonnemann Julie (2017)[35] Grattan Institute Report No. 2017-01, February 2017,Grattan Institute, Australia 2017

'Engaging students: creating classrooms that improve learning 2017'

When students are engaged in class, they learn more. It is vital that teachers create the right classroom climate for learning: raising student expectations; developing a rapport with students; establishing routines; challenging students to participate and take risks. These all affect how much their students engage and learn. What teachers teach (the curriculum) and how they teach it (pedagogy) are central to the value of every lesson. But other elements of teaching matter too. In this report we look at one of these 'other' elements of effective teaching – creating a classroom environment that gives all students the best opportunity to learn. A good learning environment raises student expectations, encourages them to participate, and ensures that no student can fly under the radar.1 Get it right, and students will thrive in the class; they may even love it. Get it wrong, and the classroom can become a place of stress, infecting the teacher and the students.

Blazar David (March1, 2017)[36] Harvard Graduate School of Education, Educational Evaluation and policy analysis

'Teacher and Teaching Effects on Student's Attitudes and Behaviors.'

Research has focused predominantly on how teachers affect students' achievement on standardized tests despite evidence that a broad range of attitudes and behaviors are equally important to their long-term success. It is found that upper-elementary teachers have large effects on self-reported measures of students' self-efficacy in math, and happiness and behavior in class. Students' attitudes and behaviors are predicted by teaching practices most proximal to these measures, including teachers' emotional support and classroom organization. However, teachers who are effective at improving test scores often are not equally effective at improving students' attitudes and behaviors. These findings lend empirical evidence to well-established theory on the multidimensional nature of teaching and the need to identify strategies for improving the full range of teachers' skills.

STUDIES CONDUCTED IN INDIA

Institue for Social and Economic Change (ISEC) (1981)[1]**,**

'A study on the universal primary education in Tumkur District of Karnataka'

ISEC conducted a study on the universal primary education in Tumkur District of Karnataka and observed that, the percentage of non-enrolment, irregular attendance was higher among girls. The dropout rate was higher among the illiterate and large families. The reasons for dropout and irregular attendance were household work, rearing cattle, looking after younger siblings, working on daily wages, group influence and lack of interest in school work.

R.M. Rai (1987),[2] U.P

A survey of elementary education was conducted in the rural areas of Ghazipur district. The major findings of the study were all primary schools worked under the administration of Basic Education Council and there was a village committee of primary education in every village, average strength of

teachers per school was four, eighty seven percent of the schools were located in buildings constructed by the basic education committee, greatest problem of teachers of schools was economic and internal assessment was prevalent in the primary schools.

Karabi Kar (1993),[(3)] Research scholar, Gauhati University

"A study was conducted on the development of primary education in Goalpara District , Assam during post independent period and its impact on society."

The major findings of the study were that the progress of primary education during post independent period has been phenomenal. No formal educational institution before the advent of British. The British rulers as well as the Christian missionaries promoted the education of both boys and girls, though the number of institutions and enrolment was not so encouraging. It was after independence that the more stress is 102 laid on primary education through the implementation of the constitutional provisions. The administrative setup of primary schools were more or less satisfactory, attempt was made to follow two different types of curriculum in primary schools for boys and girls, but with the increase of popularity of co education no such difference was kept, except sewing and knitting for girl‘s schools and mother tongue became the medium of instruction in the district. No significant changes in the qualitative standard of primary education in the district. Direct expenditure on primary education increased under the successive Five Year Plan periods, but the amount was not sufficient to coup with the increasing requirement and the number of teachers was not at par with increase in enrolment.

Pattnaik Jyotsna (Sep 1996)[(4)] California State University, Long Beach

Article **(PDF Available)** *in* Early Childhood Education Journal 24(1):11-16 · DOI: 10.1007/BF02430544

‘Early childhood education in India: History, trends, issues, and achievements’

The article states that the changes in the social and economic structure of India have intensified the need for universal early childhood education. The formidable challenges before the Indian Government are: to provide high quality early childhood education programs; to preserve indigenous practices such as multilinguality, family/community involvement, participation of older children as caretakers of their younger siblings; and to provide early childhood education to all children despite serious financial constraints. This article presents a brief overview of the traditional childrearing practices in India, chronicles government initiatives in early childhood education, describes the range of programs available in India, and identifies goals that will shape the future of early childhood programs in India.

Sarmah Jayanta.Krishna. (2000, b)[(5)] *Professor Department of Political Science Gauhati University,Assam, India*

'A study on internal efficiency and cost effectiveness of primary schools: A case study of Jorhat Urban Area and Jorhat Block, Assam.'

The findings reveal that the urban schools were operating at 94 percent efficiency level and wasting only 6 percent of its resources on repeaters and dropouts. Whereas schools of rural and tea garden area were functioning very inefficiently, wasting 23 and 62 percent of their resources respectively. Only 8.13 and 40.80 percent of pupils in tea garden and rural schools respectively were found to have reached grade IV without repetition. 37.65 percent of pupils enrolled in grade I of tea garden schools discontinued their studies in the same year. Only 28.61 percent of the cohort of pupils in those schools eventually reached grade IV. It was also observed that dropout was primarily evident in the lower classes. The urban schools were found to be most cost effective (98.66 percent) as compared to rural (81.13 percent) and tea garden schools (59.47 percent). Low level of educational qualification of teachers along with uneconomic size of school and low rate of pass out contributed towards low level of school efficiency.

Reddy, P.R. (2001)[6] Research Scholar, Manipur

"Primary education in Manipur: a study of two districts."

The study reveals that, most of the primary schools surveyed (200 in the two districts) were located at a distance of above 3 kms from the block head quarters. About 77% and 89% schools had their own building in Churachandpur and Imphal districts respectively. In Churachandpur district only 13% and in Imphal only 48% of the schools were well connected by pucca roads. Public transport and roads were far from satisfactory in most of the villages. Sizeable numbers of teachers were qualified below or up to high school level. Nearly three fourths of the teachers in Churachandpur and more than half of them in Imphal did not have any teaching training certificates. No uniform timings were maintained in the functioning of primary schools in Churachandpur district. The average number of blackboards per school varied between three and four, and nearly a third of the blackboards in Churachandpur were roll up black boards. Drinking water facility was not available in 80% of the schools in Imphal and 52% schools in Churachandpur. School buildings and space were not adequate. Cleanliness of schools and children, adequacy of buildings and suitability of seating arrangements were found to be better in Churachandpur compared to Imphal. School Betterment Committee was in existence 104 in most of the schools. Increased enrollment of students was noticed in sample schools.

Aggrawal ,Yash. (2001)[7]. National Institute of Educational Planning and Administration.(NUEPA), New Delhi, India

"Progress towards universal access and retention."

The present study examined the various dimensions of access and retention in DPEP, and specifically focused on the structure and trends in enrolment for DPEP districts. The pupil –Teacher ratio has shown erratic behavior. Despite considerable progress in enrolment and retention. The study found that significant gains in access and retention have been made both under the formal as well as alternative systems of primary education.

Ramachandran, Vimala. (2001)[8] Published in the Economic and Political Weekly, 36(25)

'Community participation in primary education: innovations in Rajasthan.'

He addressess two innovative education programmes in Rajasthan – Shiksha Karmi Project and Lok Jumbish. The study reveals that, the Community mobilization is the most precious asset of Lok Jumbish, but finding people with the right attitude and aptitude was not easy. The study also depicted the plight of scheduled caste children who attend school. The Shikha Karmi Project (SKP), based on the Social Work and Research Centre (SWRC) Tilonia concept, provides a dynamic, functional model of education, involving training of local school dropouts as primary teachers, to provide education to the most vulnerable sections of society, including girls. Important features of the SKP are monitoring by Village Education Committees (VEC) to bring in mid-course correction, problem solving, adopting a process oriented approach, and involvement of NGOs.

Yadappanavar, A.V. (2002)[9] Social Welfare 48(10), January, p. 10-14.

"Factors influencing elementary schools."

The study was based on a case study, identified the major reasons for poor access and retention of children in elementary education in Deodurg Block, Raichur district, Karnataka. The study revealed that poverty was the main reason for children not being able to attend school. Teachers faced the problem of the student population migrating along with their parents looking for jobs. Girls' education was not given importance as compared to boys. Infrastructure facilities including toilet, drinking water, and playground were not satisfactory. Casual parental attitude towards schooling and poor resource planning were also responsible for poor enrolment of children.

Singh, Y.P, Joshi A and Garia, P.S. (2003)[10]. Giri institute of development studies. 195 p., Lucknow

"Social acceptability of parishadiya primary schools in comparison with other type of schools functioning in the same area.Lucknow".

The major findings were

1-The infrastructure facilities in private schools were in better condition compared to parishad schools with respect to availability of playgrounds and play materials and all were in pucca buildings.

2-Children have to pay high fees in private schools.

3-Parents were impressed with the quality of education and proper management in private schools.

Devaraj, Amaidhi et al. (2005)[(11)]

He conducted a study on the Quality of education in Chamarajanagar district of Karnataka. It revealed that, the enrollment increased, and more children lived at the school due to the availability of better infrastructure. Multigrade classes were being conducted with inputs provided in the training, and trimester exams were being held for 5th Grade. Also the headmasters (HM) held meetings with teachers together and they designed the time table and class plan, which they tried to follow. LDP was useful in communicating with younger children who were in the process of learning Kannada. Progress was made in efforts to involve and integrate the community with the school. HM engaged parents and the community in discussions about school development and children‘s learning levels. Teachers learnt how to identify children whose learning levels were low and gave them special attention. Overall, teaching methods improved through use of drama, games and art activities conducted inside the classrooms.

Mehta, Arun, C. (2008)[(12)]. National University of Educational Planning and Administration(NUEPA), New Delhi, India

“Elementary education in India: analytical report 2006-07”:

The project covers both primary and upper primary schools of all the districts of the country. The major findings were:

1-More than 85% schools had drinking water facility.

2-The development may help in attracting more physically challenged children to schools.

3-About 1.42 million disabled children were enrolled in elementary classes across the country.

Ramachandran Vimala (January 2010)[13] National University of Educational Planning and Administration(NUEPA), New Delhi,India

'Factors Influencing Successful Primary School Completion for Children in Poverty Context'

Education, nutrition and welfare schemes of the government need an extraordinary amount of individual attention. In addition to decentralization of authority and responsibility for spending money, programmes need to have much smaller 'beneficiary' groups than at present. Where there is one aanganwadi, we probably need four. Children are not passive but active participants in the process of their development and education. Throughout the research it was the interactions and activities with children that gave us an in-depth understanding of the functioning of the school, teacher attitudes/practices, physical and verbal abuse in the classroom, household nutrition/food practices and the negative impact they have on children's self-esteem/dignity.

Singh Anjali (2014) [14] Assistant Professor, Lady Irwin College, University of Delhi, Delhi, India , Article in IJSR

'Conducive Classroom Environment in Schools'

Learning takes place within a web of social relationships as teachers and pupils interact both formally and informally. Schools are institutional spaces for communities of learners, including both students and teachers. Education to be effective in schools, the environment needs to be conducive to learning, allowing the pupils space and time to interact within the learning and teaching process. Creating and maintaining stimulating learning environments can be achieved through effective classroom organization, interactive and whole school displays and a climate of innovation. Learning is directly linked to stimulants available in schools. Two schools were selected to find out the stimulants available that affects the learning of the students in schools. Teacher's behavior, good infrastructural, excursions were found out to be major stimulants in the schools for students whereas the methods of teaching like conducting activities, discussions, demonstrations were also considered as an important factors bring students to the

classrooms. Hence, stimulating environment is a pre-requisite for better learning and understanding.

Syed Saba , Rao Raghavendra (2015)[15] Published in International Journal of Contemporary Pediatrics

'Factors influencing nutritional status of school children in an urban slum of Hyderabad, India'

The conclusion of this study was that under nutrition continues to be a primary cause of ill health among children in developing countries. Adequate nutrition is critical for optimal growth, health and development of children. Objectives of the present study were to assess the nutritional status and study its association with certain pertinent socio economic and demographic factors in private school students in an urban slum of Greater Hyderabad. Methods: It was a descriptive, cross-sectional study. Study area was an urban slum in greater Hyderabad. Five private schools were chosen by systematic random technique and study was finally done with 394 participants. Socio demographic details collection was followed by assessment of nutritional status by anthropometric measurements. Results: Among 394 students, 29 % students were found to be undernourished, 17% stunted, 10% wasted 2 % both stunted and wasted. This study shows highly significant association.

Bhise C.D.* and Sonawat R. (Feb 2016)[16] (Department of Human Development S.N.D.T. Women‟s University Mumbai)

'Factors Influencing School Readiness of Children'

The study concluded that the School Readiness plays an important role in early childhood period. It sets the basis for the future development. It assures smooth transition and successful entry to primary school and first step towards entering the world of knowledge. Through school readiness child get a sure shot path for long term academic career. School readiness also works as a tool for a healthy, productive and purposeful life. Along with the major determinants of school readiness factors like family background variables, intervention given to

children and teacher, early childhood education experiences, curriculum content and teacher experience are the factors influencing school readiness.

Puhan Rasmi Ranjan, Ray Swagatika, Sun(2019)[17] Assistant Professor in Education, Rajdhani Govt. College Bhubaneswar, Odisha, International Journal of Management Science and Business Administration , Volume 5, Issue 3, , Pages 36-42

'Pre-Primary Education: Its Impact on Academic Achievement of the Learners Learning at an Elementary Stage in Odia Language Subject in Odisha'

The findings of the study revealed that the learners learning in elementary level receiving Pre-Primary Education do better in their oral and written test in Odia Language subject than the learners receiving no Pre-Primary Education. There exists a significant difference between the performance of boys learning at elementary school level in Odia language subject both written and oral test with and without receiving pre-primary education. There exists a significant difference between the achievement of girls learning at elementary school level in Odia language subject both written and oral test with and without pre-primary education.

Ghosh Saikat and Dey Subhasish(2020)[18] International Journal of Child Care and Education Policy ***volume 14****, Article number: 3 (2020)*

'Public or private? Determinants of parents' preschool choice in India'

Based on a primary sample of 1369 children from 1369 households, this study explores the determinants of parents' preschool choices between public and private. Acknowledging the possible sample selection bias in dealing with households of only those kids who have attended a preschool, we deploy Heckman sample selection model as our main regression design. Our results show the choice of a type of preschool heavily depends on parent's socioeconomic status. Economically better off and educationally more aspirant parents prefer private preschool over public preschool in spite of the fact that the former does not provide any other facilities other than education.

2.7 EMERGING POINTS :

1. Since elementary education has been essentially a state subject, the progress made has not been uniform through all states. The richer and the industrialised states have made greater progress than the poorer and non-industrialised states.
2. Classroom environment is a concern among almost all educators as it does too much to foster cooperation and acceptance as the teaching methods used by teachers.
3. School environment and peer influence makes significant contribution to the students' academic performance .
4. Economic empowerment strategies should be employed to communities to enable them afford better nutrition and adequate sanitary facilities for their children.
5. The building's structural facilities profoundly influence learning. Inadequate lighting, noise, low air quality, and deficient heating in the classroom are significantly related to worse student achievement.
6. Wealth is a strong determinant of learning disparities, even from the beginning of primary school in rural India.
7. Low level of educational qualification of teachers along with uneconomic size of school and low rate of pass out contributed towards low level of school efficiency.
8. There are studies suggesting students in schools with poor infrastructure can have lower scores than those with access to better infrastructure facilities. This makes school infrastructure a key element in a child's academic as well as holistic growth.

2.8 CONCLUSION :

The detailed study of the literature related to my study has paved me the way to move further. As it is well known, that the old researches form the foundation of new researches, so the review of literature has made the various aspects related to the topic, clear and has also guided in respect of appropriate measuring instrument and statistical techniques. The scope and design of the study

along with the limitation and delimitations were planned with the information received by the review of literature.

Preprimary education and its importance have been acknowledged by one and all. Now the factors that promote the pre-primary education has been intriguing human mind from a long time. The physical, social and cognitive development of students of three to six years depends on various factors .The students who come from a economically sound and educated families show much better performance in comparison to students of weaker section. The school standard, quality of teachers, parents and curriculum influences the development of a child. Many researches were done in west in this field .In India the research in this area is meager. Reviewing the literature and researches done on factors that affect the development of preprimary students, has given direction for the present research.

CHAPTER – 3

RESEARCH METHOD AND PROCEDURES

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3.1 INTRODUCTION :

Research plan involves the systematic procedure by which the researcher starts from the initial identification of the problem to its final conclusion. The role of the research plan is to carry on the plan in a scientific, accurate and systematic manner. The research plan and procedure provides the tool and technique by which the research problem is carried forward. The research plan consists of procedure and technique for conducting a study.

Research methodology involves such activities as identifying problem, review of the literature, formulating hypothesis, procedure for testing, measurement, data collection and analysis of data, interpreting results and drawing conclusions . Thus, mastery of the research methodology invariably enhances understanding of the research process and procedure.

WEBSTER DICTIONARY has defined **METHODOLOGY OF EDUCATIONAL RESEARCH** as, "The Science of Method or Arrangement."

Method is defined as, "Orderliness and Regular or Habitual practice in action." By stressing **'arrangement', 'orderliness' , 'regularity' and 'habitual practice', the methodology derive their substance** essentiality from the classically ideal controlled experiment which permeates rightly or otherwise, in the literature of educational research.

3.2 DEFINITION OF METHOD :

Method is a style of conducting a research work which is determined by the nature of the problem.

VARMA, M. (1965) – "AN INTRODUCTION TO EDUCATIONAL AND PSYCHOLOGICAL RESEARCH"

"Method is only in the abstract as logical entities that we can distinguish between matter and methods, in reality, they form an organic whole and matter determines method analogously as an objective determines the means and content and spirit determine style and form in literature."

According to him, content is important for determining method. The content or matter may be of three types; hence the methods are classified as follows:

(i) Theoretical problem : Survey , Experimental Method

(ii) Factual problem : Historical , Case Study , Genetic Method

(iii)Application problem : Action Research

In this research, a combination of three methods has been used. Experimental method, survey method and observation method have been used to complete the work.

3.3 SURVEY METHOD:

The word ‘survey’ has been derived from the words ‘sur’ or ‘sor’ and ‘veeir’ or ‘veior’ which means ‘over’ and ‘see’ respectively.

The word itself deals with "what is". Its scope is very vast. It describes and interprets what exists at present. Survey research as defined by Kerlinger deals with the incidence distribution and interrelation of sociological and psychological variable.

The survey method deals with three important information- of what exists, of what we want and, of how to get there.

The information of what exists is collected by testing and critically analyzing the present situation. The information is collected through discovering the possible means of achieving the goals on the basis of experiences of others or on the basis of the opinion of experts.

PURPOSE AND USE OF SURVEY METHOD:

(i) The major purpose of survey method in research is to tell ‘what is?’ i.e. to describe the problem, but many surveys go beyond a mere description of the existing situation. For example, the survey dealing with curriculum courses helps us in obtaining information not only about the strength and weaknesses of the content curriculum but also elicit recommendations for curriculum’s change.

(ii) Descriptive surveys are carried out as preliminary step to be followed by researcher using more vigorous control and more objective methods.

(iii) Descriptive surveys also serve as direct sources of valuable knowledge concerning human behaviour.

(iv) Descriptive survey is helpful in planning various educational programs. School survey is conducted to help solve the problems of various aspects of school i.e. teaching staff, curriculum, teaching methods, learning objectives etc.

INFORMATION COLLECTED BY SURVEY METHOD:

The survey method collects the following three types of information which are as follows:

(i) Of what exist?

(ii) Of what we want?

(iii)Of how to get these?

The information of what exist is gathered by studying and analyzing important aspects of present situation.

The information of what we want is obtained by clarifying goals and objectives by a study of the conditions existing elsewhere.

The information of how to get these is collected through discovering the possible means of achieving the goals and objectives on the basis of the experiences.

STEPS OF SURVEY METHOD:

(i) **Planning:** - To find out the objectives of physical, social and cognitive development of students studying in pre-primary schools, the researcher studied the related literature and planned a research design.

(ii) **Selection of instruments**:-To achieve the objective and for proving the hypothesis researcher used standardized and self-made test.

(iii) **Selection of Sample** :- For sample lottery method was used for-

(a) Selection of school

(b) Selection of students

(iv) **Data collection** :- Various tools like anthropometric test, rating scale, Muller test, Bhatia Battery test etc were administered on sample to collect the data.

ADVANTAGES OF SURVEY :

1. High representativeness- Survey enables to extract data that are nearer to the exact attributes of the larger population.
2. Low cost - Survey method is cost effective. In conducting surveys fewer resources are required. Only survey questionnaires are to be produced for this method whereas in other methods of data collection like focus group etc. researchers have to pay more.
3. Convenient Data Gathering - It provides convenient method of data gathering through online survey method from people all over the world.
4. Good statistical significance
5. No Observer subjectivity
6. Precise Results

DISADVANTAGES OF SURVEY METHOD

1. Inflexible design
2. Possibility of inappropriate questions in questionnaire

3.4. EXPERIMENTAL METHOD :

The experimental method is a scientific and logical method. It is a systematic approach to research in which the researcher manipulates one or more variables and controls and measures any change in other variables. This is a genuine way in which a control group , the subjects have been randomly assigned between the groups and the researcher only tests one effect at a time. The cause and effect relationship can be studied through experimental method.

In the experimental method, the variables are set, hypothesis is formed and data is collected. The researcher manipulates one variable and studies its effect on other variables. The hypothesis is thus tested.

The researcher chooses the appropriate type of experimental method out of different kinds on the basis of various elements like participants, the hypothesis and the available resources. The kinds of experiments are Lab experiments, Field experiments and Quasi-experiments.

For this study quasi experiment has been used.

Quasi-Experiments

Quasi-experiments are the third type of experiments that a researcher utilizes besides lab and field experiments .While lab and field experiments are called as true experiments, the quasi-experiments are called as natural experiments as the experimenter does not have true control over the independent variable. The natural condition of the situation is important for any further actions. The level of treatment cannot be randomly decided because the participants naturally fall into pre-existing groups based on their birth order in their families.

This is a good choice in situations where scientists are interested in studying phenomena in natural, real-world settings. It is also a good choice in situations where researchers cannot ethically manipulate the independent variable in question.

ADVANTAGES OF EXPERIMENTAL METHOD

1. It is scientific and systematic method and condition can be completely controlled.
2. It is reliable method as the data can be analyzed in an objective manner.
3. It helps in establishing cause effect relationship of individuals.
4. The validity of findings of experimental method can be verified.
5. It discards the subjectivity of experiments.

DISADVANTAGES OF EXPERIMENTAL METHOD

1. Experimental method is a costly affair and it also needs specialized skills to conduct it.

2. The tools used in experiments may not be satisfactory and therefore the obtained data may not be reliable.

3. Change in human behavior is inevitable. So the behavior of same individual may change under identical conditions at different times.

3.5. OBSERVATION METHOD :

Observation is another method of data collection. And as the name denotes, is a way of collecting data through observing .It is a kind of participatory study since the researcher has to involve in the process by being present at the site while taking notes or recordings.

This method is based on observation of the subject by the researcher. It is in fact a co-relational research in which a researcher observes ongoing behavior. This method is to study behaviour that occurs naturally in natural contexts. The difference between observation and experimental method is that observation is completely done in natural situations whereas in experimental method quasi-artificial environment is created to control for spurious factors and one of the variables is manipulated to find the results. Observation method can be structured or unstructured method of data collection. The difference between the two is that in structured observation data collection is conducted using specific variables and according to a fixed schedule. But in unstructured observation, data collection is done in an open and free manner in a sense that there would be no pre-determined objective.

The best thing about observation as data collection method is direct access to research phenomena, great flexibility in terms of its usage and creating a permanent record of phenomena to be referred to later. But the worst part is that it takes a long time, has a higher degree of observer's biasness and impact of observer on the primary data, because the presence of observer may influence the behavior of the sample units.

While using observation method for data collection some ethical issues also have to be met. First of all, the consent of the research participant is the foremost ethical need. At the same time, the behavior of sample group members may change with negative implications on the level of research validity if they are notified about the presence of the observer. Observation method needs to be done carefully with the supervisor's consultation and the approval of the ethical aspects of the issue by the supervisor.

There are three types of observational methods.

(a) Naturalistic Observation- It takes place in the natural, everyday setting of the participants.

(b) Participant observation- In participant observation, the researcher intervenes in the environment in some manner.

(c) Controlled Observation- It is carried in controlled and arranged conditions often in a laboratory setting.

ADVANTAGES OF OBSERVATION METHOD

1. This method allows the observer to have access to situations and people where questionnaires and interviews are inappropriate to use.
2. It is good for explaining meaning and context.
3. It is good for validity and in-depth understanding.

DISADVANTAGES OF OBSERVATION METHOD

1. This method can be taken as subjective.
2. It is time consuming and depends on the role of researcher.
3. It has high potential for role conflict for practitioner researcher.

3.6 POPULATION:

Population or universe means the entire mass under observation, is the parent group from which a sample is to be formed. A research population can be defined as large group of individuals or objects that is the chief focus of scientific study. Researches are conducted for finding answers to benefit the population but as the population's size is often large, it becomes difficult for the researcher to test all the individuals in the population as it is quite time taking and expensive. So the researcher adopts sampling techniques. The sample under observation provides only an estimate of the population characteristics.

In research methodology, population means the characteristic features of a specific group. For example preprimary students who have specific characteristics-age group, sex, personality, scholastic aptitude, academic

achievement etc. Here, the population is the students studying in govt. and private preprimary schools of urban and rural areas of Kota district.

3.7 SAMPLING:

Sampling is an important part of research; the research study cannot be undertaken without the use of sampling. The study of total population is next to impossible and impracticable. The inclusion of sampling helps to make the research findings economical, precise and accurate.

The process of sampling is a statistical procedure. It is related with the selection of the individual observation from the total population

COCHARN W.G (1963)- "In every branch of science we lack the resources , to study more than a fragment of the phenomena that might advance our knowledge."

FOX, D.S. (1969)-

“In the education, it is not possible to collect data from every respondent relevant to the study but only from fractional part of the respondents.”

Kinds of sampling :-

There are five different types of sampling. They are - Random, Systematic, Convenience, Cluster, and Stratified.

- For this study **Random Sampling** has been used. In this type of sampling each element of the population has an equal chance of occurring. It is important that all the elements of the population are taken into account.

3.8 SAMPLE:

A sample is an unbiased number of observations taken from a population. Samples are used at all places where research is conducted. Be it a scientist, marketers, government agencies, economists or research groups, all use samples for their studies and measurements.

The most important character of the sample is that it should closely resemble the population. All the participants in the sample must have the same

traits. So, if the study is about the college students, the sample should be a small percentage of students that match this description.

Here in this research study, I have taken 10 rural and 10 urban pre-primary schools and 500 students of these schools as a sample.

A **random sampling technique** by lottery method was used to select schools and students for data collection.

FIGURE- 3.1

SAMPLE

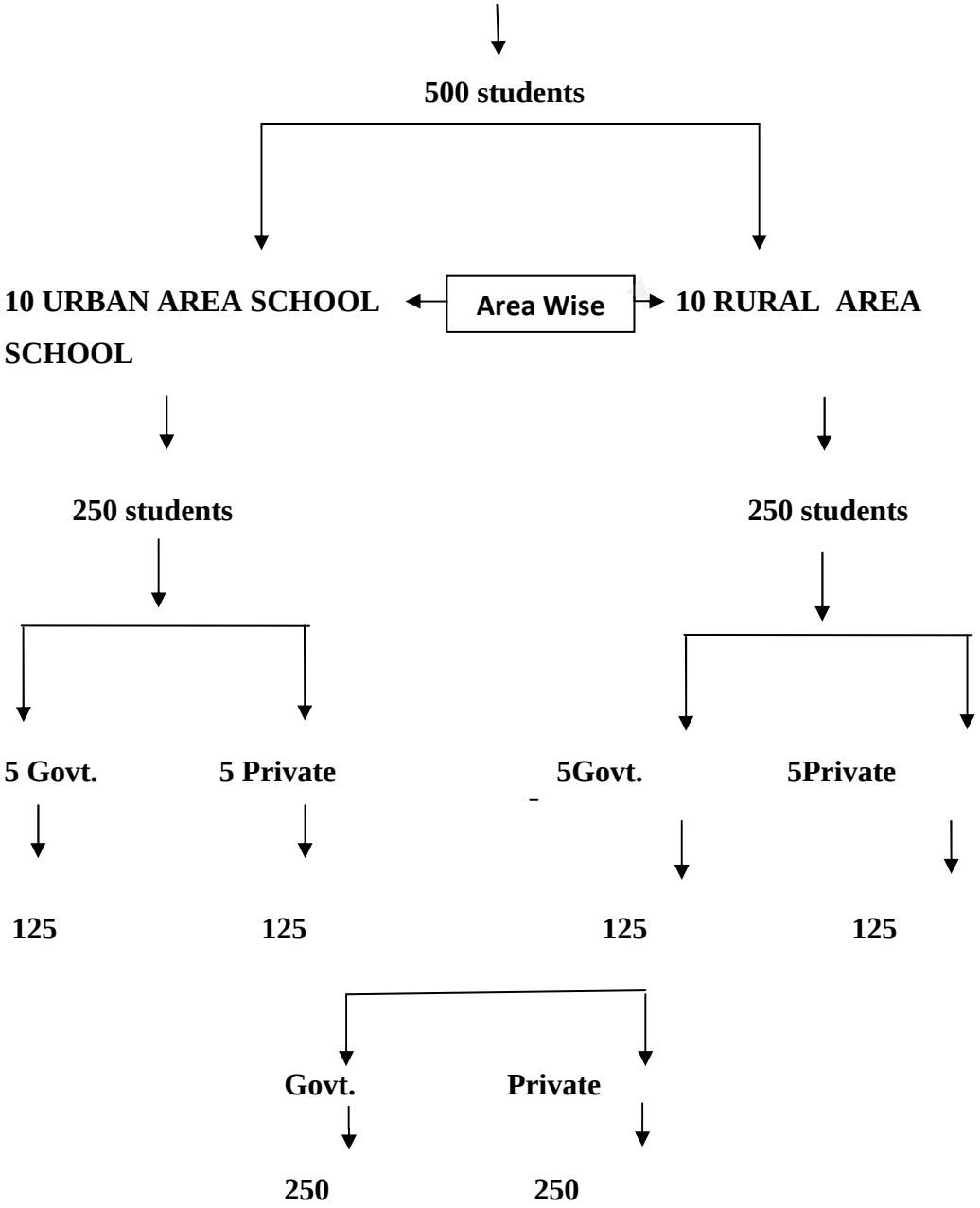


TABLE 3.1

SAMPLING FOR THE STUDY

Pre-primary schools	**No. of schools**	**Gender of students**	**No. of students**	**TOTAL**
Urban areas	10	Govt.	125	250
		Private	125	
Rural areas	10	Govt.	125	250
		Private	125	
TOTAL	20 Schools	250 Govt. 250 Private	500 Students	500 Students

TABLE 3.2

LIST OF SCHOOLS FOR SAMPLING

S. No.	Types Of Schools	Name Of Schools	No. Of Students
A.	Private preprimary schools of urban areas	(1) Satya Niketan school, Dadabari , Kota	26
		(2) Indra Vidhya Niketan, Kota	22
		(3) Priya Darshani school, Govindnagar, Kota	24
		(4) Aadarsh Nursery school, Kansua, Kota	25
		(5) New Public school,Jawahar Nagar, Kota	28
B	Govt. preprimary schools of urban areas	(6) Aanganwadi School and Govt. Upper Primary School, Gumanpura, Kota	26
		(7) Aanganwadi School and Govt. Sr. Sec. School, Indra Gandhi Nagar, Kota	28
		(8) Aanganwadi School and Govt. Sec. School, Brijrajpura, Diet Campus, Kota	22
		(9) Aanganwadi School and Govt. Girls Sec. School Udyog Nagar, Kota	26
		(10) Aanganwadi School and Govt. Upper Primary, Kansua, Kota	23

C	Private Pre-primary schools in rural areas	(11) Gurukul Academy, Kheda Rasulpur	24
		(12) Avantika Bal Vidya Mandir, Rail Gaon,	25
		(13) Maa Sharda Bal Vidya Mandir, Devli Kala	26
		(14) Divaine Bal Bharti, Ayana, Kota Dist.	25
		(15) New Prakash Bal Vidya Niketan, Itawa	25
D	Govt. Preprimary schools in rural areas	(16) Aanganwadi School and Govt. Sen. Sr. School, Dewli Kala, Kota	24
		(17) Aanganwadi School and Govt. Sen. Sr. School, Khajurna, Kota	22
		(18) Aanganwadi School and Govt. Sen. Sr. School , Kolana, Kota	19
		(19) Aanganwadi School and Govt. Sen. Sr. School, Julmi, Kota	28
		(20) Aanganwadi School and Govt. Upper Primary School, Rolana, Sangod	21

(i) Total 500 students were selected randomly by lottery method from various preprimary schools of Kota division.

(ii) 250 students from 10 preprimary schools of urban areas were chosen.

(iii) 250 students from 10 preprimary schools of rural areas were chosen.

3.9 TOOLS USED IN THIS STUDY:

The tools are required for the collection of primary data. It is important that the choice of tool is intelligently done which fulfills the purpose. Here, each research tool is appropriate in a given situation to accomplish a particular purpose. In this research study, the following tools were used, which are as follows:

(i) Anthropometric Test (Standardized test) by Alphonse Bertillon

To determine the physical development of the students studying in preprimary schools, anthropometric test was used.

(ii) **Bhatia Battery (Standardized test) by C.M Bhatia**

To determine the cognitive development of the students studying in preprimary schools, Bhatia Battery was used.

(iii) Eyberg Child Behavior Inventory (ECBI) (Standardized test) by Sheila Eyberg

To determine the social development of the students studying in preprimary schools Eyberg Child Behavior Inventory (ECBI) rating scale was used.

(iv) Curriculum, infrastructure and teacher quality Self made test

To determine the effect of curricular and extra-curricular activities, infrastructure and school facilities and the quality of teachers of a school on the development of the students studying in preprimary school a **Self made test** that has been verified by other experts has been used.

1. Anthropometric test-

Anthropometric measurement is used to measure the size, shape and composition of the human body. This is fairly easy term to recall as the prefix 'anthropo' refers to 'human' and 'metric' refers to measurement.

Purpose

These measurements are important as they are guiding factors in many fields. Perfect shape and size of body is an essential requirement for an athlete and directly related to sports performance. Health care professionals believe on anthropometric measurements to evaluate a patient's health. Health care providers, insurance companies and govt. agencies use BMI to determine the person's health.

Test of anthropometry includes height, weight, structure and composition. It is very essential to know the effects of changes to these factors, and to be able to measure them. The composition of body i.e. body fat and muscle mass also are significant for various considerations .They directly affect the performance of a child in various fields. Here the researcher has taken only three measurements i.e. **height , weight and BMI** into consideration for this study.

Method of administration and Tools:

There is a range of ways to measure the human body. These measurements require minimal tools. For instance weight is a basic anthropometric measurement that is easily measured with a scale, and height can be determined with a single measuring stick. The measurement of height and weight are needed to determine a person's BMI.

The anthropometric measures of the sample students were taken using weighing machine for the weight and measuring tape for height. The BMI needs the measurement of the height and weight of a child. The measures were recorded on the anthropometric test form .The basic information of the child like name, father’s name, age were filled in the sheet. The recorded data is analyzed using statistics and depicted through graph.

2. EYBERG CHILD BEHAVIOR INVENTORY (Rating Scale)

Rating scale is a common method of data collection which is used to collect comparative information about a specific research subject. Actually a rating scale is a multiple choice questions the surveyor assigns a value to a product or service.

It can be defined as a closed-ended survey question used to represent respondent feedback in a comparative form for a particular service or product. Rating scale is widely used variant of the popular multiple-choice question, used to gather information that provides relative information about a specific topic.

Rating scale is used by researchers in the researches when they wish to associate a qualitative measure with the various aspects of a product or feature. This scale can be used for different purposes like evaluating the performance of an employee or the behaviour of a child in a party etc. Rating scale survey

questions and checkbox questions have similarity to some extent but rating scale provides more information than merely yes/no as it provides more options to the respondent.

There are different types of rating scales including numeric rating scale, graphic rating scales, descriptive graphic rating scale and comparative rating scales, and each of these scales has specific features that differentiate one from the other.

In this research study, the **Eyberg Child Behavior Inventory (ECBI)** is used to measure the social development of pre-primary students.

The **Eyberg Child Behavior Inventory (ECBI)** is a rating scale to assess the problems of behavior in children of age group 2-6 yrs. This scale is filled by the child's parents of guardians who take care of them. It gives the information about the frequency and intensity of behavioral problem and also the extent to which parents find the behavior troublesome. It is a good assessment of the severity of disruptive behaviors besides giving a diagnosis.

This test is a simple pen and paper test that contains 36 items. Each item is a statement that represents typical problem behaviors reported by parents of conduct disordered children.

Administration

- The parents or caretakers were given the rating sheets and the writing material. If there was more than one child, then they were asked to identify the most disruptive one and fill the sheet for that child.
- The parents were explained that the sheet contains the series of phrases that describe children's behaviour. They were asked to read each item carefully and circle the appropriate number on the test sheet that corresponds to how often the behaviour currently occurs.
- 1 means that the child never exhibits that behaviour and 5 means that the child always shows that behaviour and 3 means sometimes.
- If required the item was read to the parents and then explained that they should circle 'yes' or 'no' to indicate if that behaviour is still a problem for them.

Scoring

The behaviors are rated on a 5-point scale that indicates how often the behaviors occur. The entire test hardly takes about 10 minutes to complete, and can be hand scored in about 2 minutes. The ECBI Intensity Score is calculated by adding all the circled scores in the "How often does it occur?" column. This number is recorded in the subtotal below.

TABLE 3.3

SCORING TABLE FOR EYBERG CHILD BEHAVIOR INVENTORY

Q1		**1 NEVER**	**2 SELDOM**	**3 SOMETIMES**	**4 OFTEN**	**5 ALWAYS**
No. of students in rural area schools	Govt.					
	Private					
No. of students in urban area schools	Govt.					
	Private					

3. BHATIA BATTERY TEST:- This test was constructed by C.M Bhatia in 1955 . This was developed to test the intelligence of Indian population. It includes five sub-tests.

Administration and scoring

The particulars of a child were filled in the answering sheet. The time was carefully recorded with the help of stop watch. The subject was treated cheerfully and permissible amount of aid was provided.

(I) KOH'S BLOCK DESIGN TEST :

The four cubes were shown to the child and the 1st design made on the card was demonstrate to the child. Then all cubes were mixed. The subject was asked to make designs as shown in the cards. This battery includes 10 designs from original 17 designs from the Koh's test. The time for first five designs is 2 minutes and for the remaining five is 3 minutes.

The cards with different designs in different colors were displayed to the test taker and he/she was asked to reproduce them using a set of colored blocks. The performance was assessed on the basis of accuracy of drawing and the observation of the children behaviour during the test. Any peculiar behaviour could be recorded in the remark column.

TABLE 3.4

SCORING TABLE FOR KOH'S BLOCK DESIGN TEST

Design No.	Time Taken in Min and Sec	Success or failure	Any Remarks
1 2 3 - 10			

Scoring

For the first five designs and for each design, 2 marks for success within a minute, 1 mark for success between 1-2minutes and 0 mark for failure or success after the time limit was scored. And for each design from no. 6 to 10, 3 marks for success within a minute, 2 marks for success between 1-2 minute and 1 mark for a failure or success after the time limits was given. Maximum possible score is 25.

(II) ALEXANDER PASS ALONG TEST:-

All the designs of the original test are included in this battery . The first and the smallest box was shown and explained to the subject . It was emphasized that blocks could not be lifted but only could be moved. The first design was demonstrated and then the subject was asked to make designs beginning from first with appropriate boxes as in the design cards. The first four of these are to be completed in two minutes and the rest of the four have to be completed in three minutes. If the child failed within the time period twice successively then the test was stopped.

TABLE 3.5

SCORING TABLE FOR ALEXANDER PASS ALONG TEST

Design No.	Taken in mts. and sec.	Success or Failure	Any remarks
1 2 3 - - 8			

Scoring

For each subtest from 1-4, 2 marks for success within a minute,1 mark for success between 1-2minutes and 0 mark for failure or success after the time limit was scored. And for each design from no. 5 to 8, 3 marks for success within a minute, 2 marks for success between 1-2 minute and 1 mark for success between 2 -3 minutes and 0 mark for a failure or success after the time limits was given. Maximum possible score is 20

(III) PATTERN DRAWING TEST:

In this test , there are eight cards with different patterns of increasing difficulty and the child was asked to draw these patterns in one go without lifting the pencil . This test was taken after giving one demonstration. The time for the first four cards is 2 minutes and for the rest four cards is 3 minutes. If a child failed twice in succession the test was cancelled

TABLE 3.6

SCORING TABLE FOR PATTERN DRAWING TEST

Pattern No.	Time Taken in Min. and Sec.	Success or failure or F	Any Remarks
1 2 - - 8			

Scoring

For each subtest from 1-4, 2 marks for success within a minute,1 mark for success between 1-2minutes and 0 mark for failure or success after the time limit was scored. And for each design from no. 5 to8, 3 marks for success within a minute, 2 marks for success between 1-2 minute and 1 mark for success between 2 -3 minutes and 0 mark for a failure or success after the time limits was given. Maximum possible score is 20

(II) IMMEDIATE MEMORY TEST : This test has two parts simple and reverse or forward or backward . The child was asked to repeat the numbers as the examiner said. The number of digits was increased in every trial. The test was continued till the child repeated it successfully in the same order. In forward or simple type, the digits were repeated in the same order whereas in the reverse type they were repeated in the backward position from last to first.

TABLE 3.7

SCORING TABLE FOR IMMEDIATE MEMORY TEST

	SpanSpan		SpanSpan
For S Sounds		For Digits	
For Reversed Sounds		For Reversed Digits	

Scoring

Direct – One mark each for the number of digits or sounds in maximum correct reproduction was given. Maximum possible score is 9

Reverse - One mark each for the number of digits or sounds in maximum correct reversed reproduction was given. Maximum possible score is 6.

(II) PICTURE CONSTRUCTION TEST:-

This test required the subject to construct a picture that is given in parts . The parts were to be meaningfully combined to construct the picture. The time for two pictures is two minutes and for the rest of the three pictures it is three minutes.

In the first subtest picture is divided into two pieces, in the second, the picture is divided into four pieces, in the third it is divided into six pieces, in the fourth it is divided into eight pieces and in the fifth it is divided into twelve pieces.

TABLE 3.8

SCORING TABLE FOR PICTURE CONSTRUCTION TEST

Picture No.	**Time Taken in Min and Sec**	**Success or Failure**	**Any Remarks**
1 2 - 5			

Scoring

For each picture from 1-3, 2 marks for success in 1 minutes, 1 mark for success between 1-2 minutes and 0 marks for a failure or success after the time limit. And for each picture from 4-5, 3 marks for success between 1-2 minutes,

4. SELF-MADE TEST FOR CURRICULUM, SCHOOL INFRASTRUCTURE AND TEACHER QUALITY –

To measure the effect of curricular and extra-curricular activities, infrastructure and school facilities and teacher quality on the development of students studying in preprimary schools, a self-made test was made.

Curricular and co-curricular activities play an important role in the overall development of the students. The high-quality infrastructure facilitates better instruction, develops student outcomes, and reduces dropout rates, among other benefits. Besides, teacher quality is another important determinant of the development of child's development

A self-made questionnaire to assess the effect of curriculum, school facilities and infrastructure and teacher quality was constructed. It contains 36 questions and they are closed-ended questions where a research participant had to answer in 'Yes' and 'No'. The questions are meant to be asked to teachers, students and few questions are meant for observation purpose.

This test has been constructed on the basis of three parameters.

(i) In the first parameter 'curricular and extra-curricular activities', **10 questions** have been made on areas - academics, cultural and sports. The following questions are taken under this parameter.

CURRICULAR AND EXTRA CURRICULAR ACTIVITIES

(To be asked by teachers)

1. Is GK taught to the students? (Y/N)
2. Do the students have games period every week? (Y/N)
3. Do the students have drawing/craft period every week? (Y/N)
4. Do they learn music and dance in the school? (Y/N)
5. Do they learn recitation in the school? (Y/N)

6. Do they have dramatization in the school? (Y/N)
7. Is story telling done in the schools? (Y/N)
8. Are the religious and national festivals celebrated in the school ? (Y/N)
9. Are the students involved in annual function of the school? (Y/N)
10. Do the students have pool parties and picnics? (Y/N)

(ii) In the second parameter 'school infrastructure and school facilities' **12 questions** have been included on the areas - basic amenities, school facilities and classroom environment. The following are the questions under this category.

INFRASTRUCTURE AND CLASSROOM ENVIRONMENT

(To be observed)

11. Do the students have classrooms to sit? (Y/N)
12. Do the students sit on furniture in the classroom? (Y/N)
13. Is the furniture comfortable and attractive for the kids? (Y/N)
14. Is white board and marker used for teaching? (Y/N)
15. Is there an interactive white board in classrooms to show the presentations? (Y/N)
16. Is there an A .C in the classroom? (Y/N)
17. Is the classroom big and airy with proper natural light? (Y/N)
18. Are there clean and hygienic washrooms in the school? (Y/N)
19. Is there clean and potable water in the school? (Y/N)
20. Does the school have proper playground and activity area? (Y/N)
21. Is there enough number of toys and puzzle games for the kids? (Y/N)
22. Is there enough number of helpers to assist the kids for their needs? (Y/N)

(iii) The third parameter 'teacher quality' includes **14 questions** covering areas – teacher's behavior, teaching skills and communication skills. The following are the questions under this category.

TEACHER QUALITY

(To be asked by students)

23. Do you like your teachers? (Y/N)
24. Are the teachers polite and loving to you? (Y/N)

(To be observed)

25. Do the teachers have good communication skills? (Y/N)
26. Do the teachers use teaching aids in the class? (Y/N)
27. Are the teachers presentable and attractive? (Y/N)
28. Are the teachers cool towards the students? (Y/N)
29. Do the teachers pay individual attention on each student? (Y/N)
30. Are the teachers trained and qualified? (Y/N)
31. Are the students able to identify simple digits, alphabets and Hindi letters? (Y/N)
32. Are the students able to do simple calculations of one and two digits? (Y/N)
33. Are the students able to understand simple instructions given in English? (Y/N)
34. Are the students able to take dictation of simple words? (Y/N)
35. Do the teachers make proper use of blackboard? (Y/N)
36. Do the teachers use some teaching aid to explain the concept? (Y/N)

In all there are **36 questions** related to curricular and extra-curricular activities, infrastructure and school facilities and teacher quality of a school. These parameters and the construction of questions have been decided under the guidance of subject experts. The questionnaire was sent to three experts who finalized these 36 questions out of 50. After the experts opinion correction was made and this tool was administered on the students of 2 preprimary schools in my neighborhood.

The reliability of this tool was tested by split-half method and was found 0.87. The face validity and content validity were checked as an evidence for the validity of the tool.

TABLE 3.9

SCORING TABLE FOR SELF MADE QUESTIONNAIRE

S No.	CATEGORY	QUESTION NO.	TOTAL QUESTIONS
1.	**Curricular and extra-curricular activities**	Q1 to Q10	10
2.	**Infrastructure and classroom environment**	Q11 to Q22	12
3.	**Teacher quality**	Q23 TO Q36	14

Administration and Scoring

The self made test is easy to administer. The test contains questions under different parameters for the assessment of different variables. The details of the respondent were filled which included name, age, father's name, occupation etc. The first category questions were answered by the teachers in 'yes' or 'no'. It did not take much time. The second category questions were meant for observation by the researcher to assess the quality of infrastructure and school facilities of a school. In the third category to judge the teacher quality observation was done and the responses were taken from the students. As the students are pretty small, the questions were explained nicely to them to get their response. Each question was answered in 'yes' and 'no. The responses were analyzed by assigning a numeric value '1' for 'Yes' and '0' for 'No' to every answer. This made it easy to compare responses of different individuals, which in turn, enabled statistical analysis of survey.

3.10 ANALYSIS PROCEDURES :

1. Mean, S.D and student 't' test had been applied for studying the significance difference.

2. Product Moment co-efficient of correlation ‘r’ had been applied for studying the inter relationship between Physical, Social and Cognitive development of students.
3. The investigator made use of computer in analyzing the data.
4. Interpretations were drawn with reference to analyzed data.

3.11 CONCLUSION :

The present chapter depicts the whole picture of the execution of this research study. It deals with the methods, tools and techniques applied by researcher in her study. Researcher applied anthropometric test, Bhatia Battery test, Eyberg Child Behavior Inventory and self made test to evaluate the physical, cognitive and social development of preprimary students. The constructed tool is relevant to this study and suitably helped the researcher in data collection.

CHAPTER – 4

DATA ANALYSIS AND INTERPRETATION

CHAPTER - 4

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION :

Data analysis is the most vital step of any meaningful research. The data is collected in a particular context through various tools like questionnaire, interview, rating scale etc. in order to reach to some result. However, the conclusions can only be drawn when the collected data is arranged in some order and then analyzed. Data analysis can be defined as the process of cleaning, transforming and modeling data to draw useful information. The aim of data analysis is to get useful information from the collected data and take decisions or draw conclusions on its basis. Objectives of the research can be achieved by analyzing the collected data and examining the responses and opinions of the respondents. The key areas which were analyzed on the basis of collected data are (i) Physical development of children studying in govt. and private preprimary schools of urban and rural areas. (ii) Cognitive development of children studying in govt. and private preprimary schools of urban and rural areas. (iii) Social development of children studying in govt. and private preprimary schools of urban and rural areas.(iv) Effect of curricular and co-curricular activities; school infrastructure and classroom environment and teacher's quality. After analyzing these aspects hypothesis testing was carried out to reach to the relevant result of this study. Analysis of data was done through statistical techniques and the results were used for drawing conclusions.

4.2 EDITING OF DATA :

Editing of the collected data is an important step before the analysis of data. Editing of data includes the minute observation of the mistakes made while collection of the data .The researcher has edited the data for this research study on the following basis

1. The data is complete or not.
2. There is no contradiction in the collected data.

3. The instructions have been followed uniformly or not.

4. The collected data is in accordance to the objectives of the research study or not.

5. The data is reliable and authentic or not.

4.3 CLASSIFICATION AND TABULATION OF DATA :

The collected data is made useful by arranging it on the basis of some parameters. The raw data or an unarranged data does not make any sense until it is classified and put under various categories required according to the study. In this study the researcher has classified the collected data in different categories on the basis of special qualities of the variables like social development, physical development, cognitive development etc. The researcher has also classified the collected data in the homogenous group of rural and urban and govt. and private. Once the data is classified, it becomes organized for further calculations.

Tabulation of data is the arrangement of data into tabular form. It is a systematic arrangement of statistical data in rows and columns with specific titles. The table presents the concise picture of the collected data and also appeals to eyes. Analysis of data also becomes easy when the data is in tabular form. Here, in this study, the data has been put under various categories like urban govt. preprimary schools, urban private preprimary schools, rural govt. preprimary schools and rural private preprimary schools.

4.4 SPECIFIC OBJECTIVES :

1. To study the physical development of the children studying in govt. and private preprimary schools of urban areas.
2. To study the physical development of the children studying in govt. and private preprimary schools of rural areas.
3. To study the cognitive development of the children studying in govt. and private preprimary schools of urban areas.
4. To study the cognitive development of the children studying in govt. and private preprimary schools of rural areas.

5. To study the social development of the children studying in govt. and private pre primary schools of urban areas.
6. To study the social development of the children studying in govt. and private preprimary schools of rural areas.
7. To study the effect of curricular and extra-curricular activities on the development of children studying in preprimary schools.
8. To study the effect of infrastructural facility and classroom environment on the development of children studying in preprimary schools.
9. To study the effect of teacher quality on the development of children studying in pre primary schools.
10. To study the correlation between physical and cognitive development of children studying in govt. preprimary schools of urban areas.
11. To study the correlation between physical and social development of children studying in govt. preprimary schools of urban areas.
12. To study the correlation between cognitive and social development of children studying in govt. preprimary schools of urban areas.
13. To study the correlation between physical and cognitive development of children studying in private preprimary schools of urban areas.
14. To study the correlation between physical and social development of children studying in private preprimary schools of urban areas.
15. To study the correlation between cognitive and social development of children studying in private preprimary schools of urban areas.
16. To study the correlation between physical and cognitive development of children studying in govt. preprimary schools of rural areas.
17. To study the correlation between physical and social development of children studying in govt. preprimary schools of rural areas.
18. To study the correlation between cognitive and social development of children studying in govt. preprimary schools of rural areas.
19. To study the correlation between physical and cognitive development of children studying in private preprimary schools of rural areas.
20. To study the correlation between physical and social development of children studying in private preprimary schools of rural areas.

21. To study the correlation between cognitive and social development of children studying in private preprimary schools of rural areas.

4.5 TESTING HYPOTHESIS :

1. There is no significant difference between the physical development of the children studying in govt. and private preprimary schools of urban areas.
2. There is no significant difference between the physical development of the children studying in govt. and private preprimary schools of rural areas.
3. There is no significant difference between the cognitive development of the children studying in govt. and private preprimary schools of urban areas.
4. There is no significant difference between the cognitive development of the children studying in govt. and private preprimary schools of rural areas.
5. There is no significant difference between the social development of the children studying in govt. and private preprimary schools of urban areas.
6. There is no significant difference between the social development o f the children studying in govt. and private preprimary schools of rural areas
7. There is no significant effect of the curricular and extra-curricular activities of preprimary schools on the development of children studying in pre primary schools.
8. There is no significant effect of the infrastructural facility and classroom environment of preprimary schools on the development of children studying in pre primary schools.
9. There is no significant effect of the teacher quality of pre primary schools on the development of children studying in preprimary schools.
10. There is no significant correlation between physical and cognitive development of children studying in govt. preprimary schools of urban areas.

11. There is no significant correlation between physical and social development of children studying in govt. preprimary schools of urban areas.
12. There is no significant correlation between cognitive and social development of children studying in govt. preprimary schools of urban areas.
13. There is no significant correlation between physical and cognitive development of children studying in private preprimary schools of urban areas.
14. There is no significant correlation between physical and social development of children studying in private preprimary schools of urban areas.
15. There is no significant correlation between cognitive and social development of children studying in private preprimary schools of urban areas.
16. There is no significant correlation between physical and cognitive development of children studying in govt. preprimary schools of rural areas.
17. There is no significant correlation between physical and social development of children studying in govt. preprimary schools of rural areas.
18. There is no significant correlation between cognitive and social development of children studying in govt. preprimary schools of rural areas.
19. There is no significant correlation between physical and cognitive development of children studying in private preprimary schools of rural areas.
20. There is no significant correlation between physical and social development of children studying in private preprimary schools of rural areas.

21. There is no significant correlation between cognitive and social development of children studying in private preprimary schools of rural areas.

4.6 STATISTICAL TECHNIQUES :

The following statistical techniques are used for this study:

(a) **Mean –** Mean in simple terms is the 'average value'. It is " the total sum of all the scores divided by the number of scores". There are two methods of calculating mean: (i) direct method and (ii) short-cut method. Short cut method is preferred when the number of observations is large. The formula for the short cut method is

$$x = a + \frac{\sum f_i d_i}{\sum f_i}$$

where, a = assumed mean Type equation here.

f_i = frequency of ith class

$d_i = x_i - a$ = deviation of ith class

$\Sigma f_i = n$ = Total number of observations

x_i = class mark = (upper class limit + lower class limit)/2

(b) Standard deviation – Standard deviation is the square root of the variance i.e., the mean of the squared differences between the values of each case in the distribution and the value of the mean. The standard deviation explains how much dispersion is there in the distribution of values in a sample. It is denoted by SD/ σ . A small standard deviation means a high degree of uniformity of the observations as well as homogeneity of a series; the large standard deviation means just the opposite. The SD can be calculated by using the formula:

$$\sigma = \sqrt{\frac{\sum (x_i - \mu)^2}{N}}$$

Where, σ = population standard deviation

X_i = each value from the population

μ = the population mean

N = size of the population

(c) t-test – The t-test is a type of inferential statistics. It is used to determine whether there is a significant difference between the means of two groups. It is used for the purpose of hypothesis testing in statistics.

$$t = \frac{x_1 - x_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

where x = mean value

s = standard deviation

n = number of measurements collected

(d) Coefficient of correlation r (product moment) – Pearson correlation coefficient is a measure of the strength of a linear association that exists between two variables and is denoted by r.

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{[N\sum x^2 - (\sum x)^2][N\sum y^2 - (\sum y)^2]}}$$

Where

N = number of pairs of scores

$\sum xy$ = sum of the products of paired scores

$\sum x$ = sum of x scores

$\sum y$ = sum of y scores

$\sum x^2$ = sum of squared x scores

$\sum y^2$ = sum of squared x scores

4.7 ANALYSIS AND INTERPRETATION OF DATA :

Analysis has been done objective wise and interpretations have been made in accordance with the obtained 't' values hypothesis wise.

Objective 1 - To study the physical development (height ,weight and body mass index) of the children studying in govt. and private preprimary schools of urban areas.

Table 4.1

Significance of difference between mean physical development scores (height, weight and BMI) of the children studying in urban govt. and private preprimary schools

Variables		N	Mean	S. D	t-value	Level of significance
(i) Height in inches	Govt.	125	38.3	1.84	12.27	S .01
	Private	125	41	1.89		
(ii) Weight in kg	Govt.	125	13.4	1.35	14.28	S .01
	Private	125	15.4	.91		
(iii)Body Mass Index	Govt.	125	14.4	1.75	.75	NS
	Private	125	14.3	1.42		

Df=248 05 level of significance=1.97 .01 level of significance = 2.60

(i) The above table shows that the mean **height** of children of govt. and private preprimary schools of urban areas is 38.3 and 41 and S.D is 1.84 and 1.89 respectively. The obtained 't' value is 12.27 which is higher than the table value at .01 level for df 248 showing that there is significant difference between the heights of children studying in govt. and private schools of urban areas. Thus the null hypothesis that there is no significant difference between the heights of children studying in govt. and private preprimary schools of urban areas is rejected.

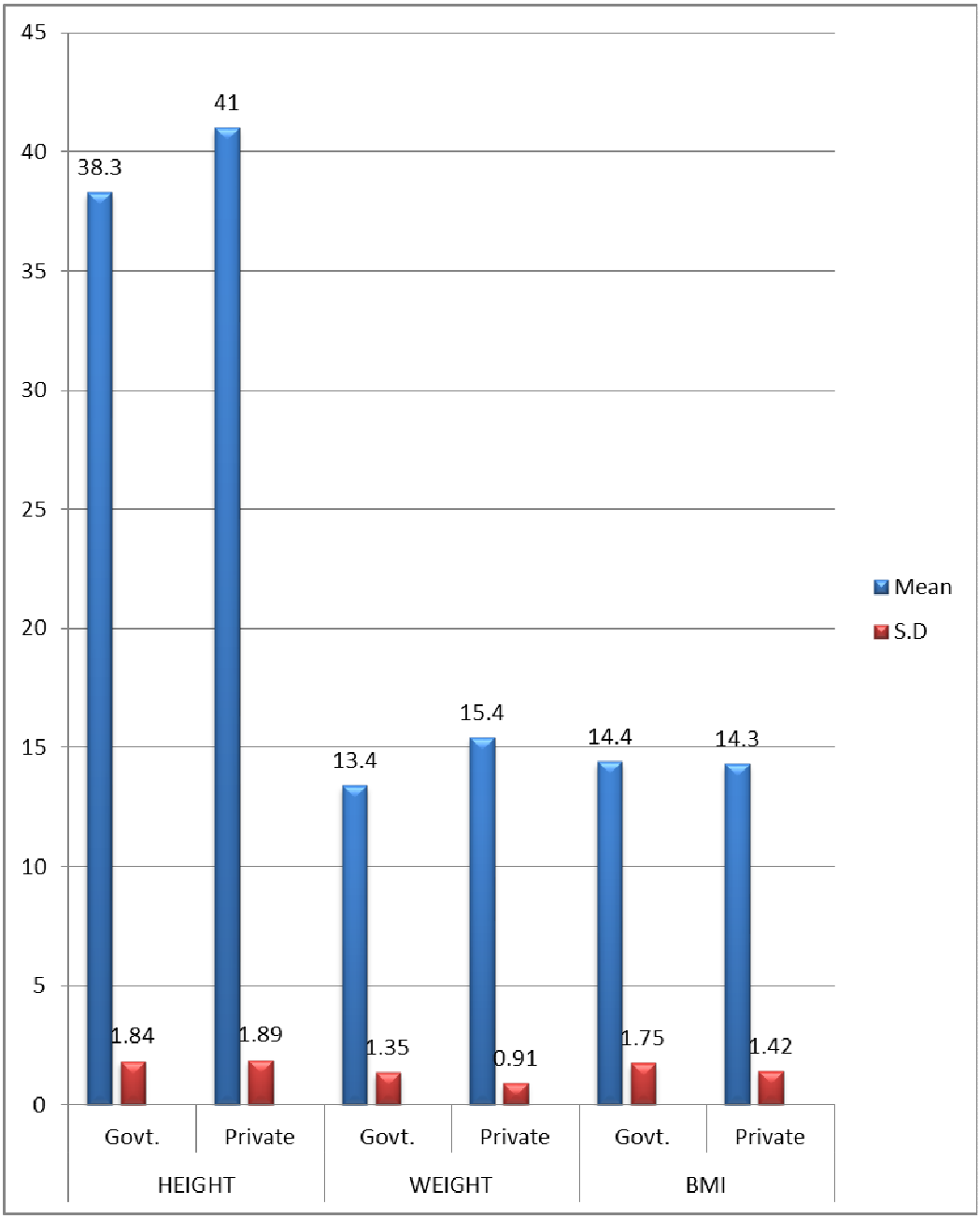
(ii) The above table shows that the mean **weight** of children of govt. and private schools of urban areas is 13.4 and 15.4 and S.D is 1.35 and .91

respectively. The obtained ‘t’ value is 14.28 which is higher than the table value at .01 level for df 248 showing that there is significant difference between the weight of children studying in govt. and private schools of urban areas. Thus the null hypothesis that there is no significant difference between the weight of children studying in govt. and private preprimary schools of urban areas is rejected.

(iii) The above table shows that the mean **Body Mass Index** of children of govt. and private schools of urban areas is 14.4 and 14.3 and S.D is 1.75 and 1.42 respectively. The obtained ‘t’ value is 0.75 which is less than the table value at .01 level for df 248 showing that there is no significant difference between the BMI of children studying in govt. and private schools of urban areas. Thus the null hypothesis that there is no significant difference between the BMI of children studying in govt. and private schools of urban areas is not rejected.

Graph no. – 4.1

Graph representing the mean and S.D of the physical development (height ,weight and BMI) of the children studying in govt. and private preprimary schools of urban areas.



Objective 2 - To study the physical development (height ,weight and Body Mass Index) of the children studying in govt. and private preprimary schools of rural areas.

Table 4.2

Significance of difference between mean physical development scores (height, weight and BMI) of the children studying in rural govt. and private pre primary schools

Variable		N	Mean	S.D	t-value	Level of significance
(i) Height in inches	Govt.	125	38.1	1.70	9.5	S .01
	Private	125	40	1.54		
(ii) Weight in kg	Govt.	125	13.1	1.3	11.4	S .01
	Private	125	14.7	1.26		
(iii) Body Mass Index	Govt.	125	14.22	1.71	.88	NS
	Private	125	14.37	1.37		

Df=248 .05 level of significance=1.97 .01 level of significance = 2.60

(i) The above table shows that the mean **height** of children of govt. and private schools of rural areas is 38.1 and 40 and S.D is 1.70 and 1.54 respectively. The obtained 't' value is 9.5 which is higher than the table value at .01 level for df 248 showing that there is significant difference between the height of children studying in govt. and private schools of rural areas. Thus the null hypothesis that there is no significant difference between the height of children studying in govt. and private preprimary schools of rural areas is rejected.

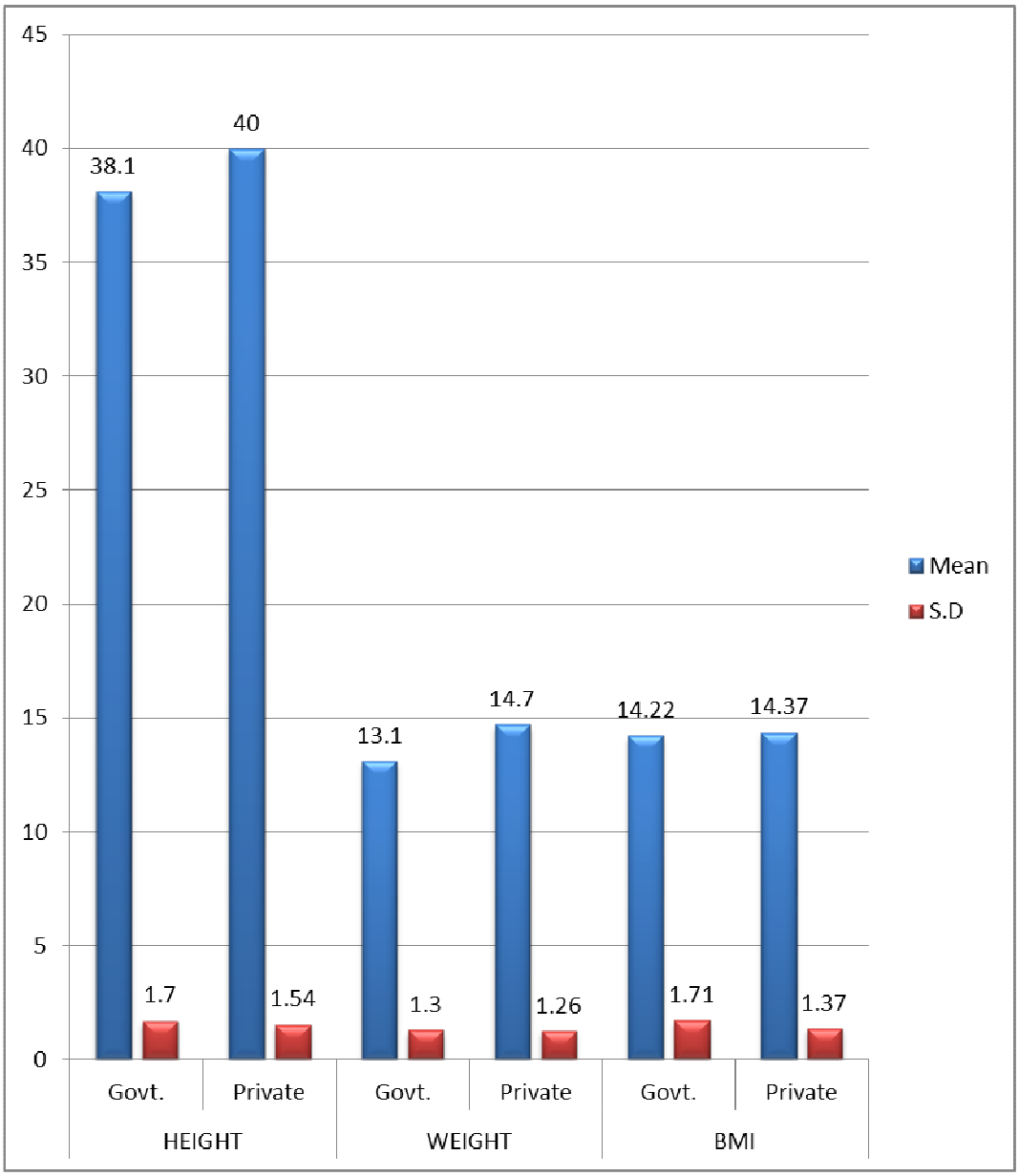
(ii) The above table shows that the mean **weight** of children of govt. and private schools of rural areas is 13.1 and 14.7 and S.D is 1.3 and 1.26 respectively. The obtained 't' value is 11.4 which is higher than the table value at .01 level for df 248 showing that there is significant difference

between the weight of children studying in govt. and private schools of rural areas.. Thus the null hypothesis that there is no significant difference between the weight of children studying in govt. and private preprimary schools of rural areas is rejected.

(iii) The above table shows that the mean **BMI** of children of govt. and private schools of rural areas is 14.22 and 14.37 and S.D is 1.71 and 1.37 respectively. The obtained 't' value is .88 which is less than the table value at .01 level for df 248 showing that there is no significant difference between the BMI of children studying in govt. and private schools of rural areas. Thus the null hypothesis that there is no significant difference between the BMI of children studying in govt. and private preprimary schools of rural areas is not rejected.

Graph no. – 4.2

Graph representing the mean and S.D of the physical development (height, weight and BMI) of the children studying in govt. and private preprimary schools of rural areas.



Objective 3. To study the cognitive development of the children studying in govt. and private preprimary schools of urban areas.

Table 4.3

Significance of difference between mean cognitive development scores of the children studying in urban govt. and private preprimary schools.

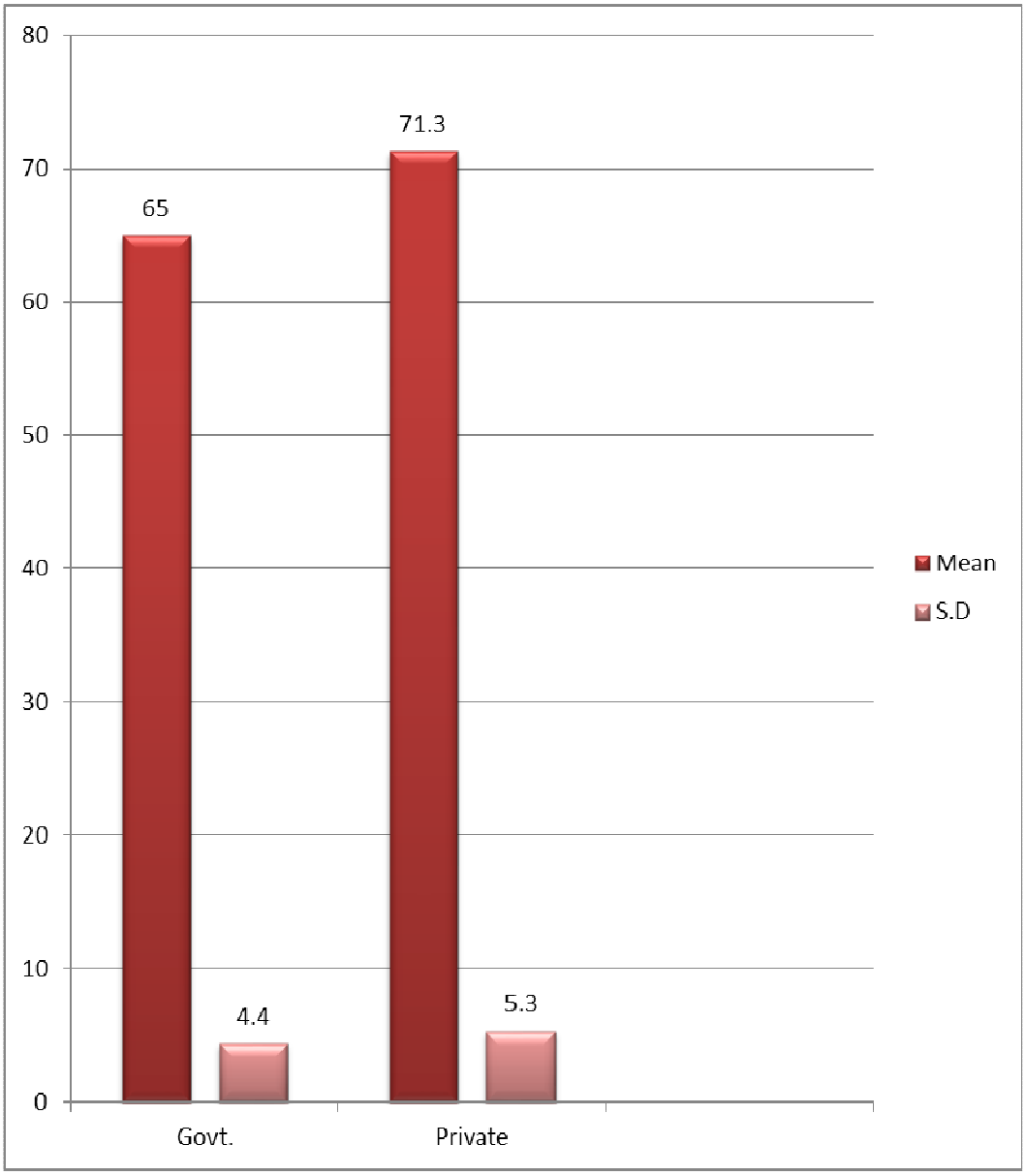
Variable	N	Mean	S. D	t-value	Level of significance
Govt.	125	65	4.4	10.5	S .01
Private	125	71.3	5.3		

Df=248 .05 level of significance=1.97 .01 level of significance = 2.60

The above table shows that the mean cognitive development score of urban govt. and private pre primary schools is 65 and 71.3 and their standard deviation is 4.4 and 5.3 respectively. The obtained value of 't' is 10.5 which is higher than the table value of 't' at .01 level of significance for df 248 . Therefore there existed significant difference between the cognitive development of children studying in govt. and private pre primary schools of urban areas. Thus the null hypothesis that there is no significant difference between the cognitive development of children studying in govt. and private preprimary schools of urban areas is rejected.

Graph no. – 4.3

Graph representing the mean and S.D of the cognitive development of the children studying in govt. and private preprimary schools of urban areas.



Objective 4. To study the cognitive development of the children studying in govt. and private preprimary schools of rural areas.

Table 4.4

Significance of difference between mean cognitive development scores of the children studying in rural govt. and private preprimary schools.

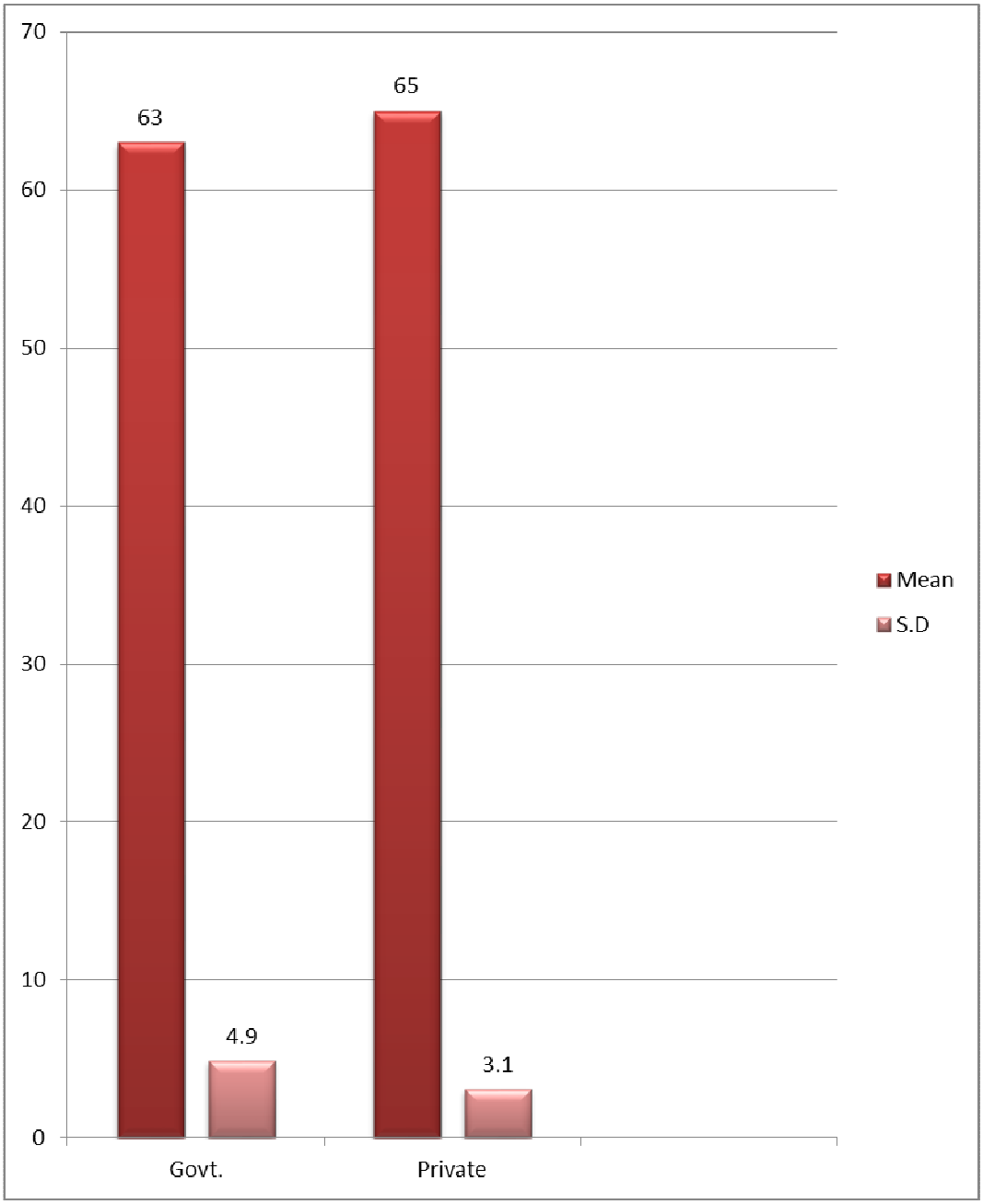
Variable	N	Mean	S. D	t-value	Level of significance
Govt.	125	63	4.9	4	S .01
Private	125	65	3.1		

Df=248 .05 level of significance=1.97 .01 level of significance = 2.60

The above table shows that the mean cognitive development score of rural govt. and private preprimary schools is 63 and 65 and the standard deviation is 4.9 and 3.1 respectively. The obtained value of 't' is 4 which is higher than the table value at .01 level of significance for df 248 . Therefore there existed significant difference between the cognitive development of children studying in govt. and private preprimary schools of rural areas. Thus the null hypothesis that there is no significant difference between the cognitive development of children studying in govt. and private preprimary schools of rural areas is rejected.

Graph no. – 4.4

Graph representing the mean and S.D of the cognitive development of the children studying in govt. and private pre primary schools of rural areas.



Objective 5. To study the social development of the children studying in govt. and private pre primary schools of urban areas.

Table 4.5

Significance of difference between mean social development scores of the children studying in urban govt. and private preprimary schools.

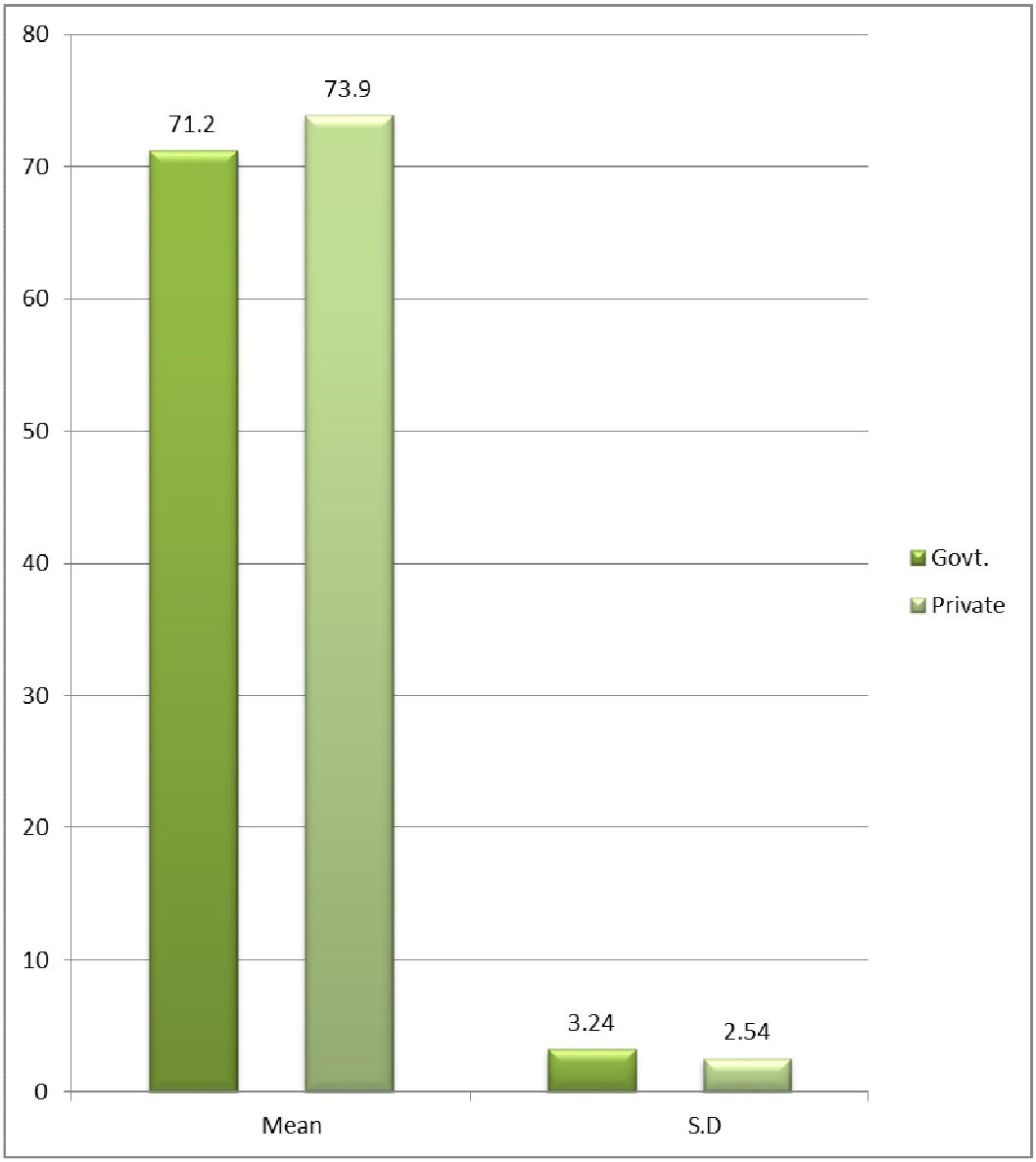
Variable	N	Mean	S. D	t-value	Level of significance
Govt.	125	71.2	3.24	6.75	S .01
Private	125	73.9	2.54		

Df=248 .05 level of significance=1.97 .01 level of significance = 2.60

The above table shows that the mean social development scores of the children studying in urban govt. and private preprimary schools are 71.2 and 73.9 and their standard deviation are 3.24 and 2.54 respectively. The obtained value of 't' is 6.75 which is higher than the table value 2.60 of 't' at .01 level of significance for df 248 . Therefore there existed significant difference between the social development of children studying in govt. and private preprimary schools of urban areas. Thus the null hypothesis that there is no significant difference between the social development of children studying in govt. and private preprimary schools of urban areas is rejected.

Graph no. – 4.5

Graph representing the mean and S.D of the social development of the children studying in govt. and private preprimary schools of urban areas.



Objective 6- To study the social development of the children studying in govt. and private pre primary schools of rural areas .

Table 4.6

Significance of difference between mean social development scores of the children studying in rural govt. and private preprimary schools.

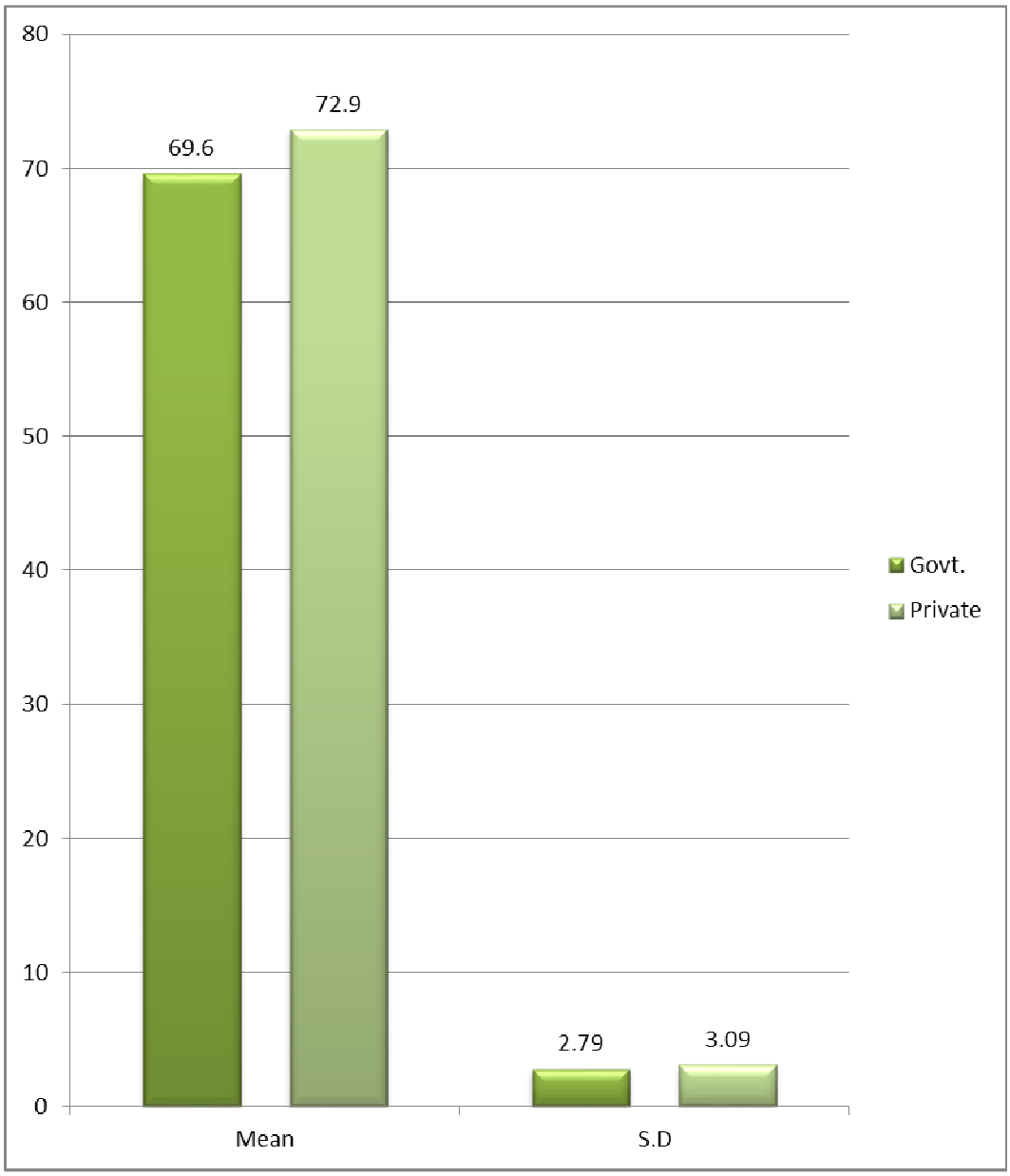
Variable	N	Mean	S. D	t-value	Level of significance
Govt.	125	69.6	2.79	9.1	S .01
Private	125	72.9	3.09		

Df=248 .05 level of significance=1.97 .01 level of significance = 2.60

The above table shows that the mean social development score of rural govt. and private pre primary schools is 69.6 and 72.9 and the standard deviation is 2.79 and 3.09 respectively. The obtained value of 't' is 9.1 which is higher than the table value 2.60 of 't' at .01 level of significance for df 248 . Therefore there existed significant difference between the social development of children studying in govt. and private preprimary schools of rural areas. Thus the null hypothesis that there is no significant difference between the social development of children studying in govt. and private preprimary schools of rural areas is rejected.

Graph no. – 4.6

Graph representing the mean and S.D of the social development of the children studying in govt. and private preprimary schools of rural areas.



Objective 7 – To study the effect of curricular and extra-curricular activities on the development of children studying in preprimary schools.

Table 4.7

Significance of difference between the mean scores of the development of children studying in preprimary schools with good and poor curricular and extra-curricular activities

Variable	N	Mean	S. D	t-value	Level of significance
Good	325	7.3	0.9	12.8	S .01
Poor	175	6.4	0.8		

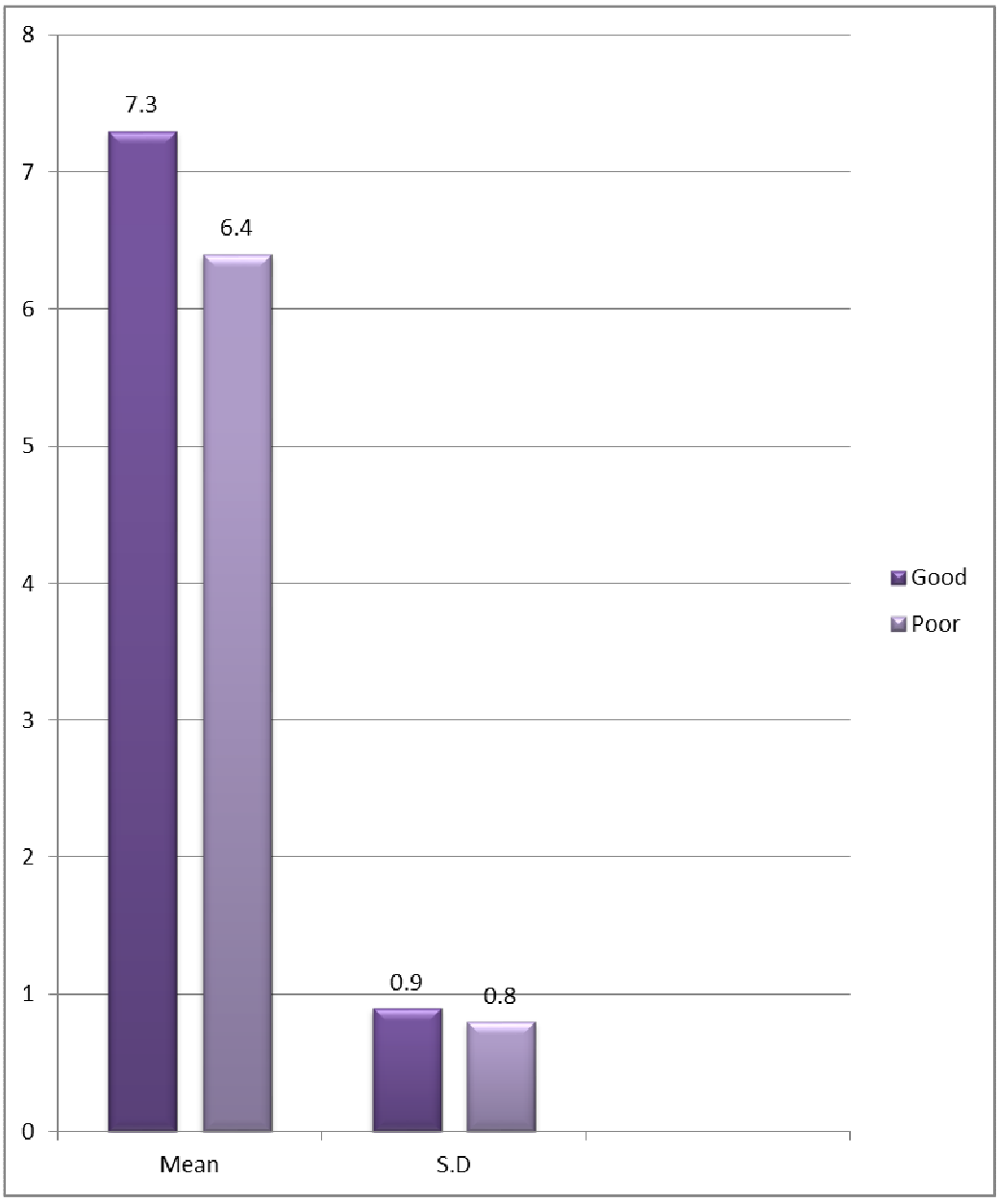
Df=498 .05 level of significance=1.97 .01 level of significance=2.59

It can be observed from the above table that the mean scores of the development of children studying in preprimary schools with good and poor curricular and extra-curricular activities is 7.3 and 6.4 and their standard deviation is 0.9 and 0.8 respectively. The obtained value of 't' is 12.8 which is higher than the table value 2.59 of 't' at .01 level of significance for df 498. Thus the null hypothesis that there is no significant effect of curricular and extra-curricular activities on the development of children studying in preprimary schools is rejected.

Therefore it revealed that there is significant effect of curricular and extra-curricular activities on the development of children studying in preprimary schools.

Graph no. – 4.7

Graph representing the mean and S.D of the development of children studying in preprimary schools with good and poor curricular and extra-curricular activities



Objective 8 – To study the effect of infrastructural facility and classroom environment on the development of children studying in preprimary schools.

Table 4.8

Significance of difference between mean scores of the development of children studying in preprimary schools with good and poor infrastructural facility and classroom environment.

Variable	N	Mean	S. D	t-value	Level of significance
Good	280	8.9	1.13	13.33	S .01
Poor	220	7.7	1.10		

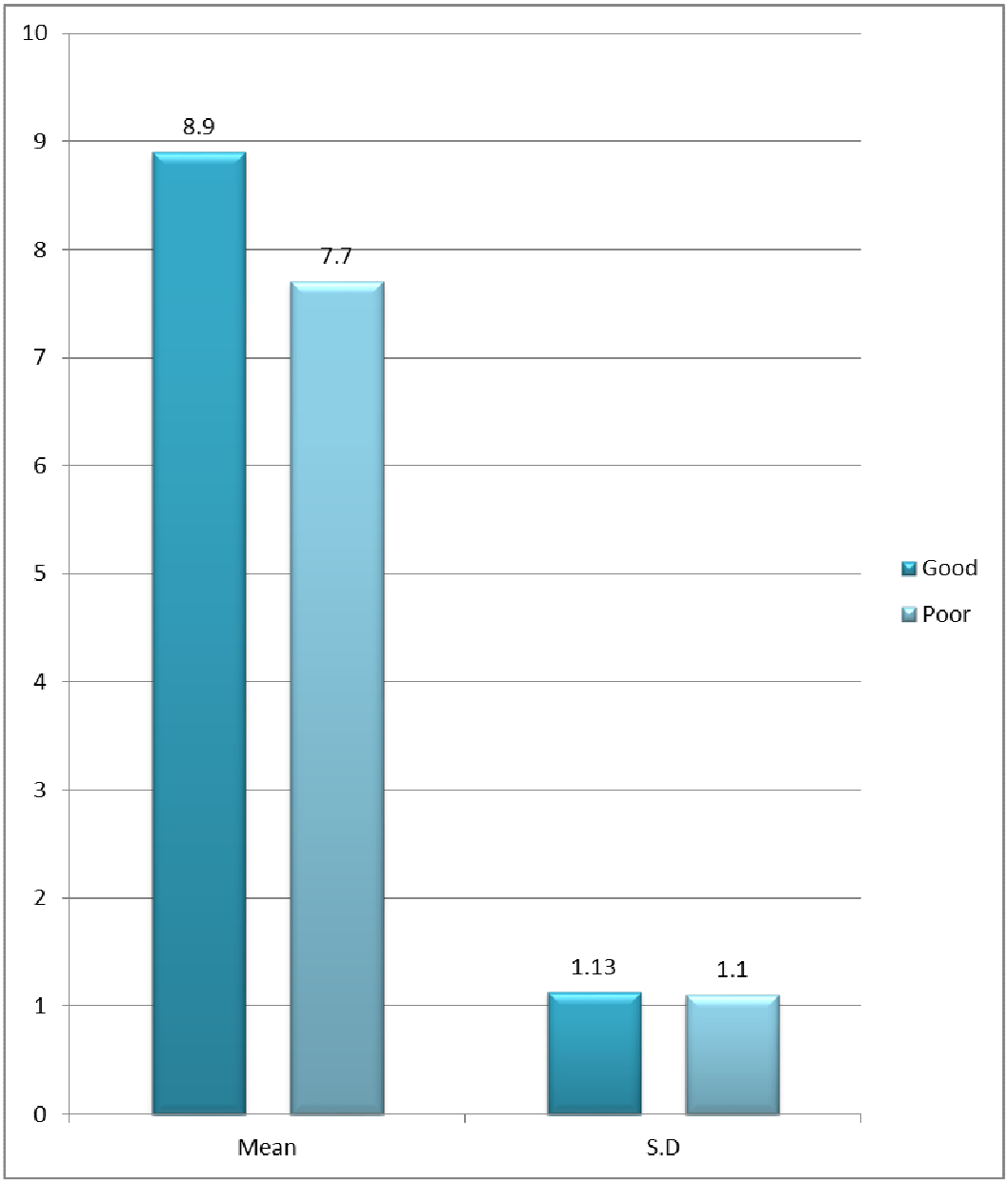
Df=498 .05 level of significance=1.97 .01 level of significance=2.59

It can be observed from the above table that the mean of the development of children studying in preprimary schools with good and poor infrastructural facility and classroom environment is 8.9 and 7.7 and their standard deviation is 1.13 and 1.10 respectively. The obtained value of 't' is 13.33 which is higher than the table value 2.59 at .01 level of significance for df 498. Thus the null hypothesis that there is no effect of infrastructural facility and classroom environment on the development of children studying in preprimary schools is rejected.

Therefore it can be said that there is significant effect of infrastructural facility and classroom environment on the development of children studying in preprimary schools.

Graph no. – 4.8

Graph representing the mean and S.D of the development of children studying in preprimary schools with good and poor infrastructural facility and classroom environment



Objective 9 – To study the effect of teacher quality on the development of children studying in preprimary schools.

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Table 4.9

Significance of difference between mean scores of development of children studying in preprimary schools with good and poor teacher quality.

Variable	N	Mean	S. D	t-value	Level of significance
Good	290	10.7	1.74	11.42	S .01
Poor	210	9.1	1.80		

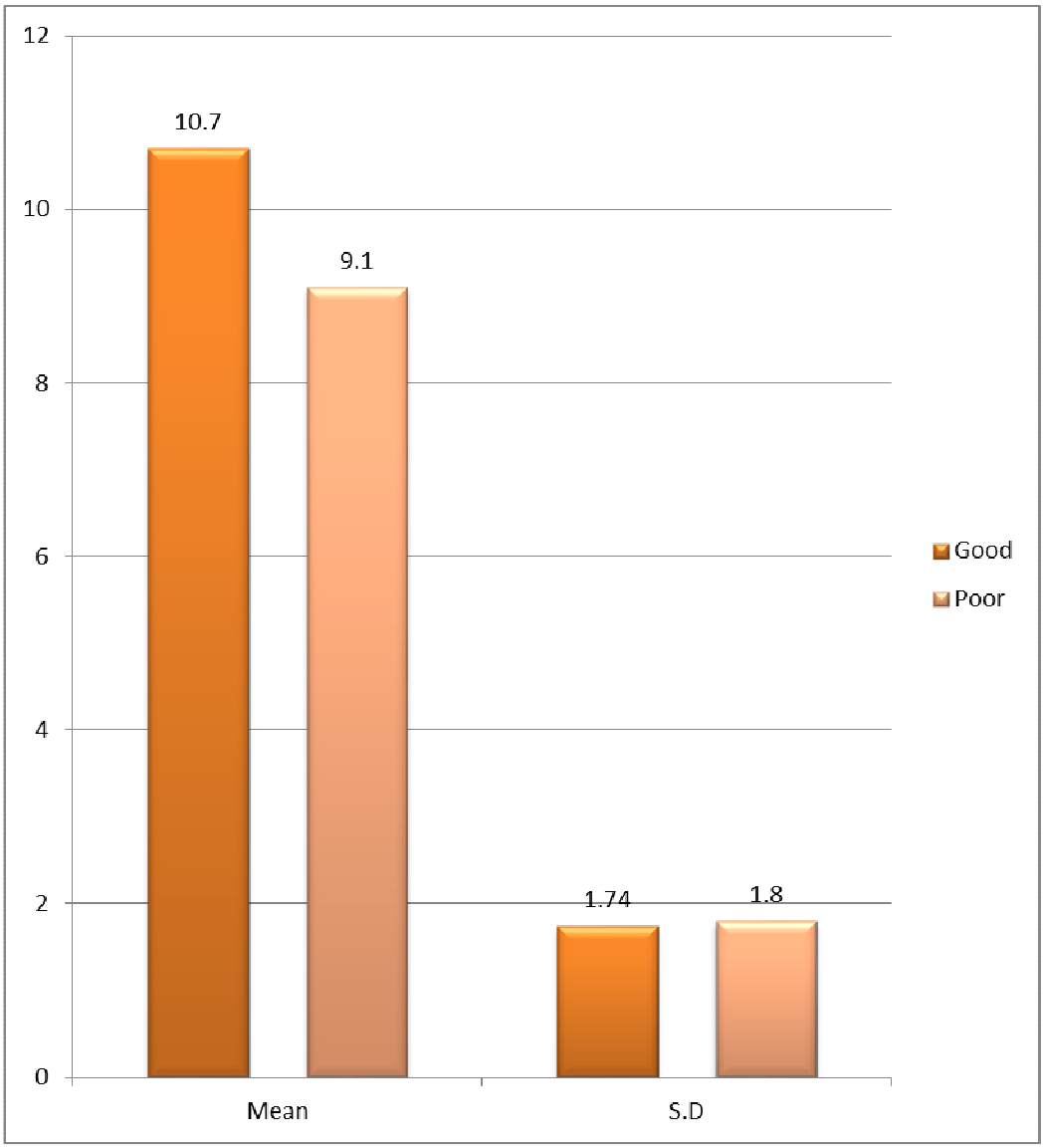
Df=498 .05 level of significance=1.97 .01 level of significance=2.59

It can be observed from the above table that the mean scores of development of children studying in preprimary schools with good and poor teacher quality is 10.7 and 9.1and their standard deviation is 1.74 and 1.80 respectively. The obtained value of 't' is 11.42 which is higher than the table value at .01 level of significance for df 498. Thus the null hypothesis that there is no effect of teacher quality on the development of children studying in preprimary schools is rejected.

Therefore it can be said that there is significant effect of teacher quality on the development of children studying in preprimary schools.

Graph no. – 4.9

Graph representing the mean and S.D of the development of children studying in preprimary schools with good and poor teacher quality.



Objective 10-12. To study the correlation between physical and cognitive; physical and social; and cognitive and social development of the children studying in govt. preprimary schools of urban areas.

Table 4.10

Product moment co-efficient of correlation between physical and cognitive; physical and social; and cognitive and social development of the children studying in govt. preprimary schools of urban areas.

Variables		r	Level of significance
Physical	Cognitive	0.30	S .01
Physical	Social	0.53	S .01
Cognitive	Social	0.08	NS

Df=N1+N2-2 .05=.174 .01=.228 Df=123

(i) It can be observed from the table 4.10 that the value of co-efficient of correlation between physical and cognitive development of children studying in govt. preprimary schools of urban areas is 0.30 which is significant at .01 level with df 123. Thus the null hypothesis that there is no significant correlation between physical and cognitive development of children studying in govt. preprimary schools of urban areas is rejected. There existed low positive relationship between physical and cognitive development of children of urban govt. preprimary schools.

(ii) The table 4.10 shows that the value of co-efficient of correlation between physical and social development of children studying in govt. preprimary schools of urban areas is 0.53 which is significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between physical and social development of children of govt. preprimary schools of urban areas is rejected. There existed moderate positive relationship between physical and social development of children of urban govt. preprimary schools.

(iii) It can also be observed from the table 4.10 that the value of co-efficient of correlation between cognitive and social development of children studying in govt. preprimary schools of urban areas is .08 which is not significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between cognitive and social development of children studying in govt. preprimary schools of urban areas is not rejected. There existed no relationship between cognitive and social development of children studying in urban govt. preprimary schools.

Objective 13-15. To study the correlation between physical and cognitive; physical and social; and cognitive and social development of the children studying in private preprimary schools of urban areas.

Table 4.11

Product moment co-efficient of correlation between physical and cognitive; physical and social; and cognitive and social development of the children studying in private preprimary schools of urban areas.

Variables		**r**	**Level of significance**
Physical	Cognitive	0.13	NS
Physical	Social	0.44	S .01
Cognitive	Social	0.15	NS

Df=123 .05=.174 .01=.228

(i) It can be observed from the table 4.11 that the value of co-efficient of correlation between physical and cognitive development of children studying in private preprimary schools of urban areas is 0.13 which is not significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between physical and cognitive development of children of private preprimary schools of urban areas is not rejected. There existed no relationship between physical and cognitive development of children studying in urban private preprimary schools.

(ii) The table 4.11 shows that the value of co-efficient of correlation between physical and social development of children studying in private preprimary schools of urban areas is 0.44 which is significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between physical and social development of children of private preprimary schools of urban areas is rejected. There existed moderate positive relationship

between physical and social development of children of urban private preprimary schools.

(iii) It can also be observed from the table 4.11 that the value of co-efficient of correlation between cognitive and social development of children studying in private preprimary schools of urban areas is .15 which is not significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between cognitive and social development of children of private preprimary schools of urban areas is not rejected. There existed no relationship between cognitive and social development of children of urban private preprimary schools.

Objective 16-18 - To study the correlation between physical and cognitive; physical and social; and cognitive and social development of the children studying in govt.pre primary schools of rural areas .

Table 4.12

Product moment co-efficient of correlation between physical and cognitive; physical and social; and cognitive and social development of the children studying in govt. preprimary schools of rural areas.

Variables		**r**	**Level of significance**
Physical	Cognitive	0.06	NS
Physical	Social	0.45	S .01
Cognitive	Social	0.38	S .01

Df=123 .05=.174 .01=.228

(i) It can be observed from the table 4.12 that the value of co-efficient of correlation between physical and cognitive development of children studying in govt. preprimary schools of rural areas is 0.06 which is not significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between physical and cognitive development of children of govt. preprimary schools of rural areas is not rejected. There existed no relationship between physical and cognitive development of children of rural govt. pre primary schools.

(ii) The table 4.12 shows that the value of co-efficient of correlation between physical and social development of children studying in govt. preprimary schools of rural areas is -0.45 which is significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between physical and social development of children of govt. preprimary schools of rural areas is rejected. There existed moderate positive relationship between physical and social

development of children of rural govt. preprimary schools. Therefore the students with good physical development show good social development .

(iii) It can also be observed from the table 4.12 that the value of co-efficient of correlation between cognitive and social development of children studying in govt. preprimary schools of rural areas is 0.38 which is significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between cognitive and social development of children of govt. preprimary schools of rural areas is rejected. There existed low positive relationship between cognitive and social development of children of rural govt. preprimary schools.

Objective 19-21 - To study the correlation between physical and cognitive; physical and social; and cognitive and social development of the children studying in private preprimary schools of rural areas .

Table 4.13

Product moment co-efficient of correlation between physical and cognitive; physical and social; and cognitive and social development of the children studying in private preprimary schools of rural areas.

Variables		r	Level of significance
Physical	Cognitive	0.27	S .01
Physical	Social	0.46	S .01
Cognitive	Social	-0.30	S .01

Df=123 .05=.174 .01=.228

(i) It can be observed from the table 4.13 that the value of co-efficient of correlation between physical and cognitive development of children studying in private preprimary schools of rural areas is 0.27 which is significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between physical and cognitive development of children studying in private preprimary schools of rural areas is rejected. There existed low positive relationship between physical and cognitive development of children of rural private preprimary schools. This shows that the students with good physical development show good cognitive development.

(ii) The table 4.13 shows that the value of co-efficient of correlation between physical and social development of children studying in private preprimary schools of rural areas is 0.46 which is significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between physical and social development of children of private preprimary schools of rural areas is rejected.

There existed moderate positive relationship between physical and social development of children studying in rural private preprimary schools.

(iii) It can also be observed from the table 4.13 that the value of co-efficient of correlation between cognitive and social development of children studying in private preprimary schools of rural areas is -0.30 which is significant at .01 level with df 123. Thus the null hypothesis of no significant correlation between cognitive and social development of children of private preprimary schools of rural areas is rejected. There existed low negative relationship between cognitive and social development of children of rural private preprimary schools. This shows that the students with good cognitive development show poor social development and the students with good social development show poor cognitive development.

4.8 CONCLUSION :

In this chapter the researcher has analyzed the collected data using different statistical tools and explained them. The main conclusions received from the analysis of data have been presented in the next chapter.

CHAPTER - 5

RESEARCH SUMMARY, CONCLUSION AND RECOMMENDATIONS

CHAPTER – 5
RESEARCH SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION:

Research report is the written form of all the research work. It is the final step of research work which includes the presentation of all the research work in a brief and concise written form so that the evaluator and others can easily get the complete information of the topic, method, statistical tools and result of the research work.

The researcher ends the research report by writing the educational implications and giving suggestions for the further research.

5.2 RESEARCH SUMMARY:

PREPRIMARY EDUCATION

Pre Primary Education can be defined as “a set of knowledge along with skills and experience as well as behavioral rules which provides the essential for coping successfully in everyday life and at school.” Pre primary schools are known with different names like nursery schools, pre schools, kindergarten etc. However the aims of all these organizations are the same. They are formal institutions of education for children of 3-6 yrs of age group.

Pre primary education comprise of three years. The first year is called the nursery where a child of 3-4 yrs (approx) is admitted. The second year is called LKG/Jr. KG where a child goes at the age of 4-5 yrs. The third year is called HKG/Sr. KG where a child comes at the age of 5-6yrs. Though pre primary education has not been made free and compulsory for the children of India as it is not a fundamental right, but its importance has been well recognized by the government. The various subjects taught are English, Maths, EVS, General knowledge, Drawing and Craft Etc. for the holistic development of a child.

Education in India is provided by the public sector and the private sector which draw financial help from central or state or local government. Children join

these schools according to socio-economic condition and background of their families. Children who are poor join government schools whereas who belong to higher strata attend private pre-schools. “Research suggests that preprimary education is vital for the development of young children before they are exposed to formal school” **(Kaul, 2002)**. It helps in cognitive development of children at the early classes of primary education and it has strong effect on attendance and participation of children once they enter primary school.

The importance of preprimary education has been realized from a long time by the educational policy and program in India and it has also been a constitutional commitment as a part of the directive principles. A lot of importance has been given to preprimary education by the **National policy on Education 1986.**

According to the Present Status of Preprimary Education in India, preschool education is provided by private schools and government Integrated Child Development Services (Anganwadi) centres. Besides, there are some ECCE centres running under the supervision of Sarva Siksha Abhiyan. Some preschools are as an attachment to government as well as private schools. There are approx. 493,700 preprimary institutions in India, out of which 456,994 are in rural areas. While "primary education prepares the ground of all formal learning" **(Sharma 1997),** preprimary learning prepares the foundation for both education and personal development. In the rural India there is less awareness about the preprimary education and the development of young children solely depends on their family and community. In urban communities, the level of preprimary education directly depends on the factors of class and wealth. The children of affluent families only get the access to Kindergarten and Montessori schools. The poor, neglected, underprivileged children remain devoid of such educational institutions and litter around in the streets.

While pedagogies differ, it is generally believed that preschool lays the foundation of further formal education. The children who get the opportunity to attend preschool are better trained for kindergarten than children who do not. Preschool education provides students a good start and makes them ready to face the challenges of primary school. Preschool attendance improves all round

development in children. Preschool education teaches the child to adjust with his peer group and adjust with the new surrounding, allowing to develop the personality by exposing the creativity of the child in a natural way. It arouses curiosity, develops problem solving skills and decreases the chances of learning disabilities.

DEVELOPMENTAL MILESTONES :

The development of a child takes place faster than grown-ups. Though the growth and development of each child is different as each child grows at its own pace, but there are certain developmental milestones for physical, social and cognitive development of children between the age of 3-6 yrs. If the child does not meet these milestones, they need a clinical support.

The physical development includes the fine motor skills and the gross motor skills. The fine motor skills include sketching, cutting, coloring, holding a pencil, writing etc. The gross motor skills require less precision. Child starts showing balance in various activities that he conducts like climb, walk, jump etc. A child feels excited about physical activity like kicking ball, catching and chasing ball and sleeps soundly after getting tired. He also acquires excellence in eye-hand co-ordination and improves his skills of puzzle game, building blocks, drawing shapes and coloring them Child seeks pleasure in playing with water, bathing himself, getting dressed and tying laces. A child might show a preference in using left or a right hand. He wants to do his job independently. Day to day activities like brushing teeth, bathing, dressing up, wiping his face are carried by him.

The social development also takes place at this age. By 3yrs of age a child starts to separate from parents more easily. The preschoolers become more independent and find their own way of playing. Family and its bonding are critical to the physical, mental, and social health of developing preschoolers. Various aspects of the family such as parenting techniques, discipline, the number and the birth order of siblings, the family's economic standard, circumstances, health of family members all contribute to young children's psychosocial development.

Cognitive development refers to the development of thought processes, problem solving, memory and decision making. Cognitive development means person's ability to perceive and understand his or her world through the interaction of genetic and learned factors. Preschoolers present an exquisite example of the manner in which children play an active role in their own cognitive development. They show their skill development in comprehending, explaining, organizing, manipulating, predicting and constructing. The young minds also see patterns in objects and events of the world and then make an effort to arrange those patterns to explain the world.

Piaget gave four different stages of cognitive development. They are as follows:

(i) Sensory-motor stage (INFANCY)

The first stage lasts from birth to two years old. This stage is marked by lack of sense of logic and thought.

(ii) Pre-Operational stage (2yrs-6yrs)

In this stage a child's behavior is directed by principles like egocentrism and animism.

(iii) Concrete operational stage (6/7-12/13yrs)

This stage lasts from 6/7 until adulthood. The child attains the ability to reason things.

(iv) Formal operational stage (12/13-adulthood)

It lasts from 12/13 until adulthood. The child advances from logical reasoning with concrete examples to abstract examples

FACTORS AFFECTING THE DEVELOPMENT OF STUDENTS OF 3-6 YRS

- Curricular and co-curricular activities play an important role in the overall development of the students. These activities are as essential as academics. They learn time management skills, new and useful skills and above all show commitment. It is only when a child is given an exposure of both of these activities, that a child shows holistic development. There are ample of activities for children to choose from like cultural, sports, quiz, dance and they

can participate in any, according to their interest.

- Just like the benefits of curricular and co-curricular activities, school facilities also have a great impact on the outcome of a child and teacher as well. The better the infrastructure of the school the better is the academic performance of a child. It also affects the teacher's retention and enhances the efforts they put in teaching. And for students it affects their health, behaviour, learning and growth.
- Infrastructure of a school in general includes buildings, classrooms, laboratories and equipments. They all are crucial elements of learning environments in schools. It is quite evident that high-quality infrastructure provides better instruction, improves student performance, and decreases dropout rates, among other benefits
- Besides, teacher quality is another important determinant of the development of child's development. The quality of teacher is another important characteristic that significantly affects student performance. Also in line with current studies is the finding that for any groups of children whether underprivileged or not, the impact of good teachers is greatest and that a given investment in enhancing teacher quality will have most effect on achievement in underprivileged areas."

5.3 EMERGENCE OF THE PROBLEM :

"Preschool education is the facility of education for children before the beginning of statutory education between the ages of three to six years" **(Wikipedia, 2008).** Preschool education provides a good start to children and prepares them for the challenges of primary school. The early years i.e (3-6yrs) is an important period in a child's life, which shapes the entire development of a child. The foundation of physical, cognitive and social development is laid with the preprimary education. The aim of this research study is to study the factors conducive to the development of children studying in preprimary schools. Many researchers have worked in the field of higher education but the preprimary education has not been touched much in India.

Therefore the researcher chose this topic to throw light on the main areas like factors influencing the physical, social and cognitive development of the students and parental and associated factors relating to academic achievement.

5.4 STATEMENT OF THE PROBLEM :

"A Study Of Factors Conducive To The Development Of Children Studying In Preprimary School."

5.5 SPECIFIC OBJECTIVES:

The objectives for the study of this research problem are as follows:

1. To study the physical development of the children studying in govt. and private preprimary schools of urban areas.
2. To study the physical development of the children studying in govt. and private preprimary schools of rural areas.
3. To study the cognitive development of the children studying in govt. and private preprimary schools of urban areas.
4. To study the cognitive development of the children studying in govt. and private preprimary schools of rural areas.
5. To study the social development of the children studying in govt. and private preprimary schools of urban areas.
6. To study the social development of the children studying in govt. and private preprimary schools of rural areas.
7. To study the effect of curricular and extra-curricular activities on the development of children studying in preprimary schools.
8. To study the effect of infrastructural facility and classroom environment on the development of children studying in preprimary schools.
9. To study the effect of teacher quality on the development of children studying in preprimary schools.
10. To study the correlation between physical and cognitive development of children studying in govt. preprimary schools of urban areas.
11. To study the correlation between physical and social development of children studying in govt. preprimary schools of urban areas.

12. To study the correlation between cognitive and social development of children studying in govt. preprimary schools of urban areas.
13. To study the correlation between physical and cognitive development of children studying in private preprimary schools of urban areas.
14. To study the correlation between physical and social development of children studying in private preprimary schools of urban areas.
15. To study the correlation between cognitive and social development of children studying in private preprimary schools of urban areas.
16. To study the correlation between physical and cognitive development of children studying in govt. preprimary schools of rural areas.
17. To study the correlation between physical and social development of children studying in govt. preprimary schools of rural areas.
18. To study the correlation between cognitive and social development of children studying in govt. preprimary schools of rural areas.
19. To study the correlation between physical and cognitive development of children studying in private preprimary schools of rural areas.
20. To study the correlation between physical and social development of children studying in private preprimary schools of rural areas.
21. To study the correlation between cognitive and social development of children studying in private preprimary schools of rural areas.

5.6 TESTING HYPOTHESIS:

1. There is no significant difference between the physical development (height, weight and BMI) of the children studying in govt. and private preprimary schools of urban areas.
2. There is no significant difference between the physical development (height, weight and BMI) of the children studying in govt. and private preprimary schools of rural areas.
3. There is no significant difference between the cognitive development of the children studying in govt. and private preprimary schools of urban areas.
4. There is no significant difference between the cognitive development of the children studying in govt. and private preprimary schools of rural areas.

5. There is no significant difference between the social development of the children studying in govt. and private preprimary schools of urban areas.
6. There is no significant difference between the social development of the children studying in govt. and private preprimary schools of rural areas.
7. There is no significant effect of the curricular and extra-curricular activities of preprimary schools on the development of children studying in preprimary schools.
8. There is no significant effect of the infrastructural facility and classroom environment of preprimary schools on the development of children studying in preprimary schools.
9. There is no significant effect of the teacher quality of pre primary schools on the development of children studying in pre primary schools.
10. There is no significant correlation between physical and cognitive development of children studying in govt. preprimary schools of urban areas.
11. There is no significant correlation between physical and social development of children studying in govt. preprimary schools of urban areas.
12. There is no significant correlation between cognitive and social development of children studying in govt. preprimary schools of urban areas.
13. There is no significant correlation between physical and cognitive development of children studying in private preprimary schools of urban areas.
14. There is no significant correlation between physical and social development of children studying in private preprimary schools of urban areas.
15. There is no significant correlation between cognitive and social development of children studying in private preprimary schools of urban areas.
16. There is no significant correlation between physical and cognitive development of children studying in govt. preprimary schools of rural areas.
17. There is no significant correlation between physical and social development of children studying in govt. preprimary schools of rural areas.
18. There is no significant correlation between cognitive and social development of children studying in govt. preprimary schools of rural areas.

19. There is no significant correlation between physical and cognitive development of children studying in private preprimary schools of rural areas.
20. There is no significant correlation between physical and social development of children studying in private preprimary schools of rural areas.
21. There is no significant correlation between cognitive and social development of children studying in private preprimary schools of rural areas.

5.7 DELIMITATION OF THE STUDY :

1. The study is restricted to Kota division, Rajasthan.

2. The study is delimited to the preprimary government schools and private schools.

3. The study is delimited to the boys and girls of 3-6 yrs of government school and private school.

4. The study has been delimited to a sample of 500 students selected randomly from the 10 Govt. and 10 Private preprimary schools of rural and urban areas under Kota district.

5.8 METHOD OF RESEARCH STUDY :

Method is a style of conducting a research work which is determined by the nature of the problem. The selection of right method is the most important need for the success of any research study. The combination of three methods- **Survey, Experimental and Observation** method has been employed for this study.

5.9 POPULATION AND SAMPLE :

The population for this study consists of 10 government and 10 private preprimary schools in urban and rural areas of Kota district in Rajasthan. 500 students of government and private preprimary schools of urban and rural areas have been taken as sample to find the results of this study religiously. 250 students have been chosen from government preprimary schools of urban and rural areas. Another 250 students have been chosen from private preprimary

schools of urban and rural areas. The selection of the students has been done by **lottery method** in **Random sampling technique**.

TABLE 5.1

SAMPLING FOR THE STUDY

Pre-primary schools	**No. of schools**	**Gender of students**	**No. of students**	**TOTAL**
Urban areas	10	Govt.	125	250
		Private	125	
Rural areas	10	Govt.	125	250
		Private	125	
TOTAL	20 Schools	250 Govt. 250 Private	500 Students	500 Students

5.10 OOLS USED IN THE STUDY :

(i) Anthropometric Test (Standardized test) by Alphonse Bertillon

This test has been used for measuring the physical development of the students of pre-primary schools. The researcher has taken three parameters of this test- Height, weight and BMI.

(ii) Bhatia Battery Test (Standardized test) by C.M Bhatia

This test is used for determining the cognitive development of the students of preprimary schools. It is a combination of five sub batteries. The maximum score of this test is 95.

(iii) Eyberg Child Behavior Inventory (Standardized test)

by Sheila Eyberg

This test was used to determine the social development of students studying in preprimary schools. It is a rating inventory on the scale of 1-5. There are total 36 items in this inventory to measure the intensity of the problem.

(iv) Curriculum, infrastructure and teacher quality Self made test

To determine the effect of curricular and extra-curricular activities, infrastructure and school facilities and the quality of teachers on the development of the students studying in pre-primary school, a self made test that has been verified by other experts has been used. This questionnaire has 36 questions under these three categories. The questions are 'yes/no' types and each yes scores 1 mark and no scores 0. The reliability of this tool has been tested by split half method and was found 0.87.

5.11 STATISTICS USED IN THE STUDY :

1. Mean
2. Standard deviation
3. t-test
4. Correlation coefficient (Product moment)

5.12 STUDY OF RELATED LITERATURE :

The researcher has included the study of the related literature from the following sources:

1. Study of 10 international level books and journals related to the various variables.
2. Study of 16 national level books related to the physical, cognitive and social development.
3. Study of 4 national level book and newsletters for preprimary education and its current state in Rajasthan and other states.
4. Study of around 8 national level books and journals for curriculum, infrastructure and teacher quality.

5.13 CONCLUSION AND DISCUSSION OF THE STUDY :

The conclusion and discussion of this research study in the order of its objectives is as follows:

OBJECTIVE 1. To study the physical development (height, weight and BMI) of the children studying in govt. and private pre primary schools of urban areas.

(i) HEIGHT :

Conclusion - The conclusion drawn from the study of data is that there is significant difference between the height of the children studying in govt. and private pre primary schools of urban areas. As a result the null hypothesis that there is no significant difference between the height of the children studying in govt. and private pre primary schools of urban areas is rejected.

Discussion – There is significant difference between the heights of the children studying in govt. and private preprimary schools of urban areas. The higher mean value of height of the children of private preprimary schools shows that the children of private schools are taller than that of govt. schools because of the better physical activities in the school.

(ii) WEIGHT :

Conclusion -The conclusion drawn from the study of data is that there is significant difference between the weight of the children studying in govt. and private pre primary schools of urban areas. As a result the null hypothesis that there is no significant difference between the weight of the children studying in govt. and private pre primary schools of urban areas is rejected.

Discussion – There is significant difference between the weight of the children studying in govt. and private pre primary schools of urban areas. The higher mean value of the weight of the children of private preprimary schools shows that the children of private schools are healthier than that of govt. schools because of the better nourishment provided by their literate and aware parents.

(iii) Body Mass Index :

Conclusion - The conclusion drawn from the study of data is that there is no significant difference between the BMI of the children studying in govt. and private pre primary schools of urban areas. As a result the null hypothesis that there is no significant difference between the BMI (body mass index) of the

children studying in govt. and private pre primary schools of urban areas is not rejected.

Discussion - There is no significant difference between the BMI of the children studying in govt. and private preprimary schools of urban areas. Therefore it reveals that the children of govt. school have the same built as that of private schools of urban areas.

OBJECTIVE 2 - To study the physical development (height, weight and BMI) of the children studying in govt. and private preprimary schools of rural areas.

Conclusion - The conclusion drawn from the study of data is that there is significant difference between the height of the children studying in govt. and private preprimary schools of rural areas. As a result the null hypothesis that there is no significant difference between the height of the children studying in govt. and private preprimary schools of rural areas is rejected.

Discussion - There is significant difference between the height of the children studying in govt. and private preprimary schools of rural areas. The higher mean value of the height of the children of private preprimary schools shows that the children of private schools are taller than that of govt. schools because of the better facilities of sports and physical activities in the school.

(i) WEIGHT

Conclusion - The conclusion drawn from the study of data is that there is significant difference between the weight of the children studying in govt. and private preprimary schools of rural areas. As a result the null hypothesis that there is no significant difference between the weight of the children studying in govt. and private preprimary schools of rural areas is rejected.

Discussion - There is significant difference between the weight of the children studying in govt. and private preprimary schools of rural areas. The higher mean value of the weight of the children of private preprimary schools shows that the children of private schools are healthier than that of govt. schools because of the availability of better balanced diet.

(ii) Body Mass Index –

Conclusion -The conclusion drawn from the study of data is that there is no significant difference between the BMI of the children studying in govt. and private preprimary schools of rural areas. As a result the null hypothesis that there is no significant difference between the BMI (body mass index) of the children studying in govt. and private pre primary schools of rural areas is not rejected.

Discussion – There is no significant difference between the BMI of the children studying in govt. and private preprimary schools of rural areas. Therefore it reveals that the children of govt. school have the same built as that of private schools of rural areas.

OBJECTIVE 3 - To study the cognitive development of the children studying in govt. and private pre primary schools of urban areas.

Conclusion - This conclusion can be drawn from the analysis of data that there is significant difference between the cognitive development of the children studying in govt. and private preprimary schools of urban areas. Thus the null hypothesis that there is no significant difference between the cognitive development of the children studying in govt. and private preprimary schools of urban areas is rejected.

Discussion – According to the above conclusion there is significant difference between the cognitive development of the children studying in govt. and private preprimary schools of urban areas. The cognitive development of the children studying in private preprimary schools is better than that of the children studying in govt. preprimary schools because of the better academics and more exposure to new knowledge.

OBJECTIVE 4 - To study the cognitive development of the children studying in govt. and private pre primary schools of rural areas.

Conclusion - This conclusion can be drawn from the analysis of data that there is significant difference between the cognitive development of the children studying in govt. and private preprimary schools of rural areas. Thus the null hypothesis

that there is no significant difference between the cognitive development of the children studying in govt. and private preprimary schools of rural areas is rejected.

Discussion – According to the above conclusion there is significant difference between the cognitive development of the children studying in govt. and private preprimary schools of rural areas. The cognitive development of the children studying in private preprimary schools is better than that of the children studying in govt.pre primary schools because of the better quality of academics and more opportunities for exposure to new knowledge.

OBJECTIVE 5 - To study the social development of the children studying in govt. and private pre primary schools of urban areas.

Conclusion - This conclusion can be drawn from the analysis of data that there is significant difference between the social development of the children studying in govt. and private preprimary schools of urban areas. Thus the null hypothesis that there is no significant difference between the social development of the children studying in govt. and private preprimary schools of urban areas is rejected.

Discussion– According to the above conclusion there is significant difference between the social development of the children studying in govt. and private pre primary schools of urban areas. The social development of the children studying in private preprimary schools is better than that of the children studying in govt. preprimary schools due to the better classroom environment and emphasis on soft skills.

OBJECTIVE 6 - To study the social development of the children studying in govt. and private pre primary schools of rural areas .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant difference between the social development of the children studying in govt. and private preprimary schools of rural areas. Thus the null hypothesis that there is no significant difference between the social development of the children studying in govt. and private preprimary schools of rural areas is rejected.

Discussion – According to the above conclusion there is significant difference between the social development of the children studying in govt. and private preprimary schools of rural areas. The social development of the children studying in private preprimary schools is better than that of the children studying in govt.pre primary schools because of the congenial environment of classroom.

OBJECTIVE 7 - To study the effect of curricular and extra-curricular activities on the development of children studying in preprimary schools .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant difference between the development of the children studying in preprimary schools with good and poor curricular and extra-curricular activities .Thus the null hypothesis that there is no effect of curricular and extra-curricular activities on the development of children studying in preprimary schools is rejected.

Discussion – According to the above conclusion there is significant difference between the development of the children studying in preprimary schools with good and poor curricular and extra-curricular activities. The development of the children studying in preprimary schools with good curricular and extra-curricular activities is better than that of the children studying in preprimary schools with poor curricular and extra-curricular activities. The good curricular and extra-curricular activities provide wide exposure to the children and support the overall development of the children whereas the poor curricular and extra-curricular activities fail to do so.

OBJECTIVE 8 – To study the effect of infrastructural facility and classroom environment on the development of children studying in preprimary schools .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant difference between the development of the children studying in preprimary schools with good and poor infrastructural facility and classroom environment .Thus the null hypothesis that there is no effect of infrastructural facility and classroom environment on the development of children studying in pre primary schools is rejected.

Discussion – According to the above conclusion there is significant difference between the development of the children studying in preprimary schools with good and poor infrastructural facility and classroom environment. The development of the children studying in preprimary schools with good infrastructure is better than that of the children studying in preprimary schools with poor infrastructure. The good infrastructural facility and classroom environment plays an important role in the overall development of the children of preprimary schools.

OBJECTIVE 9 – To study the effect of teacher quality on the development of children studying in pre primary schools .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant difference between the development of children studying in preprimary schools with good and poor teacher quality. Thus the null hypothesis that there is no effect of teacher quality on the development of children studying in preprimary schools is rejected.

Discussion – According to the above conclusion there is significant difference between the development of children studying in preprimary schools with good and poor teacher quality. The development of the children studying in preprimary schools with good teachers is better than that of the children studying in preprimary schools with poor teachers. The good teaching skills and behavior of a teacher play an important role in the overall development of the children of preprimary schools.

OBJECTIVE 10 - To study the correlation between physical and cognitive development of the children studying in govt. preprimary schools of urban areas .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant correlation between physical and cognitive development of the children studying in govt. preprimary schools of urban areas .Thus the null hypothesis that there is no significant correlation between physical and cognitive

development of the children studying in govt. preprimary schools of urban areas is rejected.

Discussion – According to the above conclusion there is low positive correlation between physical and cognitive development of the children studying in govt. preprimary schools of urban areas. The children with good physical health show good cognitive development as we know that healthy brain lives in healthy body. The children with poor health show poor cognitive development.

OBJECTIVE 11 - To study the correlation between physical and social development of the children studying in govt. preprimary schools of urban areas .

Conclusion - This conclusion can be drawn from the analysis of data that there is no significant correlation between physical and social development of the children studying in govt. preprimary schools of urban areas .Thus the null hypothesis that there is no significant correlation between physical and social development of the children studying in govt. preprimary schools of urban areas is rejected.

Discussion – According to the above conclusion there is moderate positive correlation between physical and social development of the children studying in govt. pre primary schools of urban areas. The children studying in govt. preprimary schools of urban areas with good physical growth show good socialization because of the balanced overall development of such children.

OBJECTIVE 12 - To study the correlation between cognitive and social development of the children studying in govt. preprimary schools of urban areas

Conclusion - This conclusion can be drawn from the analysis of data that there is no significant correlation between cognitive and social development of the children studying in govt. preprimary schools of urban areas .Thus the null hypothesis that there is no significant correlation between physical and social development of the children studying in govt. preprimary schools of urban areas is not rejected.

Discussion – According to the above conclusion there is no correlation between cognitive and social development of the children studying in govt. preprimary schools of urban areas. The cognitive development of the children of preprimary schools does not affect their social development.

OBJECTIVE 13 - To study the correlation between physical and cognitive development of the children studying in private preprimary schools of urban areas

Conclusion - This conclusion can be drawn from the analysis of data that there is no significant correlation between physical and cognitive development of the children studying in private preprimary schools of urban areas. Thus the null hypothesis that there is no significant correlation between physical and cognitive development of the children studying in private preprimary schools of urban areas is not rejected.

Discussion – According to the above conclusion there is no significant correlation between physical and cognitive development of the children studying in private preprimary schools of urban areas. The physical development of the urban private preprimary schools does not affect their cognitive development.

OBJECTIVE 14 - To study the correlation between physical and social development of the children studying in private preprimary schools of urban areas

Conclusion - This conclusion can be drawn from the analysis of data that there is significant correlation between physical and social development of the children studying in private preprimary schools of urban areas. Thus the null hypothesis that there is no significant correlation between physical and social development of the children studying in private preprimary schools of urban areas is rejected.

Discussion – According to the above conclusion there is moderate positive correlation between physical and social development of the children studying in private preprimary schools of urban areas. The children studying in private preprimary schools of urban areas with good physical growth show good socialization because healthy children lead happy life.

OBJECTIVE 15 - To study the correlation between cognitive and social development of the children studying in private preprimary schools of urban areas.

Conclusion - This conclusion can be drawn from the analysis of data that there is no significant correlation between cognitive and social development of the children studying in private preprimary schools of urban areas .Thus the null hypothesis that there is no significant correlation between physical and social development of the children studying in private preprimary schools of urban areas is not rejected.

Discussion – According to the above conclusion there is no correlation between cognitive and social development of the children studying in private preprimary schools of urban areas. The cognitive development of the children of preprimary schools is not related to their social development.

OBJECTIVE 16 - To study the correlation between physical and cognitive development of the children studying in govt. preprimary schools of rural areas.

Conclusion - This conclusion can be drawn from the analysis of data that there is no significant correlation between physical and cognitive development of the children studying in govt. preprimary schools of rural areas .Thus the null hypothesis that there is no significant correlation between physical and cognitive development of the children studying in govt. preprimary schools of rural areas is not rejected.

Discussion – According to the above conclusion there is no correlation between physical and cognitive development of the children studying in govt. preprimary schools of rural areas. The physical health does not affect the cognitive development of children studying in govt. preprimary schools of rural areas.

OBJECTIVE 17 - To study the correlation between physical and social development of the children studying in govt. preprimary schools of rural areas .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant correlation between physical and social development of the children studying in govt. preprimary schools of rural areas .Thus the null hypothesis that there is no significant correlation between physical and social development of the children studying in govt. preprimary schools of rural areas is rejected.

Discussion – According to the above conclusion there is moderate negative correlation between physical and social development of the children studying in govt. preprimary schools of rural areas. The children studying in govt. preprimary schools of rural areas with good physical growth show poor socialization and the children with good social development show poor physical development.

OBJECTIVE 18 - To study the correlation between cognitive and social development of the children studying in govt. preprimary schools of rural areas .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant correlation between cognitive and social development of the children studying in govt. preprimary schools of rural areas .Thus the null hypothesis that there is no significant correlation between cognitive and social development of the children studying in private preprimary schools of rural areas is rejected.

Discussion – According to the above conclusion there is low positive correlation between cognitive and social development of the children studying in govt. preprimary schools of rural areas. The children of govt. preprimary schools of rural areas with good cognitive development show good socialization because intelligent children show better adjustment .

OBJECTIVE 19 - To study the correlation between physical and cognitive development of the children studying in private preprimary schools of rural areas .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant correlation between physical and cognitive development of the children studying in private preprimary schools of rural areas .Thus the null hypothesis that there is no significant correlation between physical and cognitive development of the children studying in govt. preprimary schools of rural areas is rejected.

Discussion – According to the above conclusion there is low positive correlation between physical and cognitive development of the children studying in private preprimary schools of rural areas. The good physical health leads to the good cognitive development of the children studying in private preprimary schools of rural areas.

OBJECTIVE 20 - To study the correlation between physical and social development of the children studying in private preprimary schools of rural areas .

Conclusion - This conclusion can be drawn from the analysis of data that there is significant correlation between physical and social development of the children studying in private preprimary schools of rural areas .Thus the null hypothesis that there is no significant correlation between physical and social development of the children studying in private preprimary schools of rural areas is rejected.

Discussion – According to the above conclusion there is moderate positive correlation between physical and social development of the children studying in private preprimary schools of rural areas. The children studying in private preprimary schools of rural areas with good physical growth show good socialization as happy and healthy children spread happiness around them.

OBJECTIVE 21 - To study the correlation between cognitive and social development of the children studying in private preprimary schools of rural areas.

Conclusion - This conclusion can be drawn from the analysis of data that there is significant correlation between cognitive and social development of the children studying in private preprimary schools of rural areas .Thus the null hypothesis that there is no significant correlation between cognitive and social development of the children studying in private preprimary schools of rural areas is rejected.

Discussion– According to the above conclusion there is low negative correlation between cognitive and social development of the children studying in private preprimary schools of rural areas. The children of private preprimary schools with good cognitive development show poor socialization whereas the children with good social development show poor cognitive development.

5.14 EDUCATIONAL IMPLICATIONS :

(A) EDUCATIONAL IMPLICATIONS FOR SCHOOL MANAGEMENT

1. The school management will realize the school participation and social responsibility in terms of its influence on child's development.
2. This study will focus on the need of good infrastructure and school facilities with proper hygienic environment for the positive impact on the development of students.
3. School management will be alarmed to keep the trained, experienced and suitably qualified teachers for the pre-primary classes to maintain the expected standard. These are the formative years of a child's life that shape the entire life of a child so the decision of appointing teachers should be wisely done for them.
4. The school authorities will be inspired to design the curriculum appropriate for the physical, social and cognitive development of children of 3-6yrs.
5. The school management will accept the need to organize enough extracurricular activities catering to the varied needs of children. Such activities should be essentially planned and maximum participation should be ensured.

6. The schools of rural areas will become aware about the improvement of various areas in their schools to come at par with those of urban areas. This study will focus on the need of good infrastructure and school facilities with proper hygienic environment for the positive impact on the development of students.

(B) EDUCATIONAL IMPLICATIONS FOR PARENTS

1. This research will create awareness among the rural parents about the direct effect of preprimary education on their children in the acquisition of literacy, numeracy and scientific discovery.
2. The parents especially the rural ones will understand the worth of physical development through various activities in preprimary setups.
3. This study will highlight the meaning of social and cognitive development and will justify that preprimary schooling can help the children attain them.
4. The parents will become aware by this study about the need to judge and choose the best preprimary school for their wards.

(C) EDUCATIONAL IMPLICATIONS FOR THE POLICY PLANNERS

1. This study will throw light on the impact of pre-primary education on children's academic attainment, social behavior and cognition. So the concerned authorities will be inspired to make pre-primary education free and compulsory foe the children of India.
2. This study will motivate the policy makers to make new policies that seriously work to spread and promote the access of pre-primary education to one and all of this age group.
3. This research will also emphasize on the need to make provisions to enhance the physical and social aspects along with the cognitive aspect in pre-primary schools.

5.15 SUGGESTIONS FOR FURTHER RESEARCH :

Research in any branch of human knowledge is never a closed chapter. There is always a need of finding solutions to new problems and testing the reality of the solution to the order problems. In fact the more one delves deep into some aspect, the more is the need felt to find in that context. In the light of the result, subsequent conclusions and experiences are gained in the course of the study. Following suggestions may be made for the further researches in the area.

The following are few suggestions of further research :

1. This study has been conducted on the students of pre-primary level. It should be conducted with the students of different stages of education i.e. primary level, upper primary level, secondary level, senior secondary level etc.
2. This study is limited to the mainstream pupils of pre-primary level. It should be conducted on the physically challenged pupils and the pupils with special needs at various levels.
3. The further study should be conducted on the effects of government's schemes and policies for the promotion of pre-primary education
4. This study has been limited to Kota district. It should be conducted in other districts of Rajasthan.
5. As we are aware that all variables cannot be studied in one research work. In this research social, physical and cognitive development of pre-primary children are the variables. Another research study can be done with the variables like academic achievement, attitude, adjustment and personality development of pre-primary students.
6. The variables which could not be touched in this study like the socio-economic status of the parents, family background, awareness about pre-primary education should be investigated in further research.
7. This study should be conducted in different kinds of organizations like private, government and central schools at various levels.
8. The comparative study can be done between the girls of rural and urban areas, private and govt. schools at various levels of education.
9. The comparative study can be done between the boys of rural and urban areas, private and govt. schools at different educational levels.

10. The comparative study can be done on the pre-primary education available to students in different states and the results can benefit the states lagging behind in this field, to follow the same track.
11. The further study can be conducted on the curriculum development relating to the physical, social, and cognitive development of students studying in pre-primary schools.
12. The teacher's effect on the growth and development of a child is well recognized. The further study can be conducted on the kind of training, qualifications and experience required for the teachers teaching pre-primary classes.
13. The research can be done to study the effect of teacher's attitude, personality and behavior on the holistic development of pre-primary students.
14. Further research is suggested about finding the most conducive kind of classroom environment, furniture and teaching material required for the students at pre-primary level.
15. The further study can be conducted on the role of national and international agencies and NGO's in creating and promoting the awareness of pre-primary education among the rural folk.

5.16 CONCLUSION :

The above research is the comparative study of the physical, cognitive and social development of children studying in urban/rural and govt./private pre primary schools. The research also studies the effect of curricular and extra-curricular; school infrastructure and classroom environment; and teacher's quality of a preprimary school on the development of children studying there.

The major results and findings of this research study suggest that the holistic development of private schools is better than the govt. schools. The standard of preprimary education is still poor in rural areas in comparison to urban areas. The other factors like the curriculum, infrastructure and classroom environment and the quality of teachers directly affect the academic performance of children. The research report ends with few suggestions like efforts should be done to improve the access and quality of preprimary education in rural areas. The

govt. preprimary schools of rural areas need to raise their standard in respect of their curriculum, school infrastructure, classroom environment and the quality of teachers. New technologies should be introduced to make teaching learning interesting for rural children. The infrastructure and the facilities should be attractive. The teachers should be strictly chosen on the basis of their training and teaching experience. Government should also take initiatives to enable the access of preprimary education to one and all, far and wide.

SUMMARY

SUMMARY

INTRODUCTION -

Preprimary education

A preprimary school, playschool or kindergarten, is an educational establishment or learning space offering early education to children before they begin their compulsory education at primary school. Preprimary education comprise of three years. The first year is called the nursery where a child of 3-4 yrs (approx) is admitted. The second year is called LKG/Jr. KG where a child goes at the age of 4-5 yrs. The third year is called HKG/Sr. KG where a child comes at the age of 5-6yrs. The various subjects taught are English, Maths, EVS, General knowledge, Drawing and Craft Etc. for the holistic development of a child.

Though preprimary education has not been made free and compulsory for the children of India as it is not a fundamental right, but its importance has been well recognized by the government. It provides good beginning, develops readiness for going to higher formal schools, develops language and calculation and enhances communication skills. The importance of preprimary education has been realized from a long time by the educational policy and program in India and it has also been a constitutional commitment as a part of the directive principles. The **National policy on Education 1986 (GOI, 1986)** and its **Plan of Action, (GoI, 1992)** have placed immense importance on pre-school education

According to **(TIMES OF INDIA, JULY 11, 2015)** Rajasthan govt. is drafting the early childhood educational policy for both govt. and private pre-schools. The state has initiated a process to make a policy for the development of child and to check the growth of pre-schools in the state.

According to (**DNA INDIA, MAY 31, 2018**,) to provide holistic and quality education at pre-primary, primary, upper primary, secondary and senior secondary levels, the govt. of India has launched the SMSA. As of now the RCEE (Rajasthan Council of Elementary Education) and RCSE (Rajasthan Council of Secondary Education) were taking care of SSA (Sarva Siksha Abhiyan) and RMSA (Rajasthan Madhyamik Shiksha Abhiyan) centre sponsored schemes

respectively. These two tasks will be executed by the new body, RCSCE, which will monitor, supervise and implement education from pre-education to class 12 under SMSA (Samagra Shiksha Abhiyan).

Developmental milestones of children:

The development of a child takes place faster than grown-ups. Though the growth and development of each child is different as each child grows at its own pace, but there are certain developmental milestones for physical, social and cognitive development of children between the age of 3-6 yrs. If the child does not meet these milestones, they need a clinical support.

The physical development includes the fine motor skills and the gross motor skills. The fine motor skills include sketching, cutting, coloring, holding a pencil, writing etc. The gross motor skills require less precision. The social development also takes place at this age. By 3yrs of age a child starts to separate from parents more easily. The preschoolers become more independent and find their own way of playing. Cognitive development refers to the development of thought processes, problem solving, memory and decision making. Cognitive development means person's ability to perceive and understand his or her world through the interaction of genetic and learned factors.

FACTORS AFFECTING THE DEVELOPMENT OF STUDENTS OF 3-6 YRS

Curricular and co-curricular activities play an important role in the overall development of the students. Due to the availability of enriching curriculum a child gets ample opportunities to perform and learn through the activities of choice. The infrastructure and the environment of the school also directly affects the overall development of a child studying in preprimary school. There is strong evidence that high-quality **infrastructure** facilitates better instruction, improves student outcomes, and reduces dropout rates, among other benefits. Besides, teacher quality is another important determinant of the development of child’s development. The finding that “teacher quality is one of the few school characteristics that significantly affects student performance” is quite consistent with more-recent research.

EMERGENCE OF THE PROBLEM :

Preschool education is the provision of education for children before the commencement of statutory education between the ages of three to six years **(Wikipedia, 2008).** Preschool education gives students a head start and prepares them for the challenges of primary school. The cognitive and social development of a child is directly related to the performance and academic achievement of the child. The preschool years are the years when nurturing and appropriate stimulation will reap lifelong benefits as children develop self-worth and a host of new skills that will serve them for a life time **(www.aea.aide-et-action.org.com).** As it has been widely accepted that these early years are the most crucial ones when a child can gain maximum, I chose this particular age to delve deep into the process of education and understand the factors that affect the development of the preprimary children. This study will give me an opportunity to develop an insight of the important factors that promote the growth of a child physically, socially and intellectually. Many researches have been done in this field at higher levels but the preprimary level which lays the foundation of higher education for the child is left neglected in India.

Therefore it was worthwhile to choose this topic.

STATEMENT OF THE PROBLEM :

"A Study Of Factors Conducive To The Development Of Children Studying In Preprimary School."

SPECIFIC OBJECTIVES:

The objectives for the study of this research problem are as follows:

1. To study the physical development of the children studying in govt. and private preprimary schools of urban areas.
2. To study the physical development of the children studying in govt. and private preprimary schools of rural areas.
3. To study the cognitive development of the children studying in govt. and private preprimary schools of urban areas.

4. To study the cognitive development of the children studying in govt. and private preprimary schools of rural areas.
5. To study the social development of the children studying in govt. and private preprimary schools of urban areas.
6. To study the social development of the children studying in govt. and private preprimary schools of rural areas.
7. To study the effect of curricular and extra-curricular activities on the development of children studying in preprimary schools.
8. To study the effect of infrastructural facility and classroom environment on the development of children studying in preprimary schools.
9. To study the effect of teacher quality on the development of children studying in preprimary schools.
10. To study the correlation between physical and cognitive development of children studying in govt. preprimary schools of urban areas.
11. To study the correlation between physical and social development of children studying in govt. preprimary schools of urban areas.
12. To study the correlation between cognitive and social development of children studying in govt. preprimary schools of urban areas.
13. To study the correlation between physical and cognitive development of children studying in private preprimary schools of urban areas.
14. To study the correlation between physical and social development of children studying in private preprimary schools of urban areas.
15. To study the correlation between cognitive and social development of children studying in private preprimary schools of urban areas.
16. To study the correlation between physical and cognitive development of children studying in govt. preprimary schools of rural areas.
17. To study the correlation between physical and social development of children studying in govt. preprimary schools of rural areas.
18. To study the correlation between cognitive and social development of children studying in govt. preprimary schools of rural areas.

19. To study the correlation between physical and cognitive development of children studying in private preprimary schools of rural areas.
20. To study the correlation between physical and social development of children studying in private preprimary schools of rural areas.
21. To study the correlation between cognitive and social development of children studying in private preprimary schools of rural areas.

TESTING HYPOTHESIS:

1. There is no significant difference between the physical development (height, weight and BMI) of the children studying in govt. and private preprimary schools of urban areas.

2. There is no significant difference between the physical development (height, weight and BMI) of the children studying in govt. and private preprimary schools of rural areas.

3. There is no significant difference between the cognitive development of the children studying in govt. and private preprimary schools of urban areas.

4. There is no significant difference between the cognitive development of the children studying in govt. and private preprimary schools of rural areas.

5. There is no significant difference between the social development of the children studying in govt. and private preprimary schools of urban areas.

6. There is no significant difference between the social development of the children studying in govt. and private preprimary schools of rural areas.

7. There is no significant effect of the curricular and extra-curricular activities of preprimary schools on the development of children studying in preprimary schools.

8. There is no significant effect of the infrastructural facility and classroom environment of preprimary schools on the development of children studying in preprimary schools.

9. There is no significant effect of the teacher quality of pre primary schools on the development of children studying in pre primary schools.

10. There is no significant correlation between physical and cognitive development of children studying in govt. preprimary schools of urban areas.

11. There is no significant correlation between physical and social development of children studying in govt. preprimary schools of urban areas.

12. There is no significant correlation between cognitive and social development of children studying in govt. preprimary schools of urban areas.

13. There is no significant correlation between physical and cognitive development of children studying in private preprimary schools of urban areas.

14. There is no significant correlation between physical and social development of children studying in private preprimary schools of urban areas.

15. There is no significant correlation between cognitive and social development of children studying in private preprimary schools of urban areas.

16. There is no significant correlation between physical and cognitive development of children studying in govt. preprimary schools of rural areas.

17. There is no significant correlation between physical and social development of children studying in govt. preprimary schools of rural areas.

18. There is no significant correlation between cognitive and social development of children studying in govt. preprimary schools of rural areas.

19. There is no significant correlation between physical and cognitive development of children studying in private preprimary schools of rural areas.

20. There is no significant correlation between physical and social development of children studying in private preprimary schools of rural areas.

21. There is no significant correlation between cognitive and social development of children studying in private preprimary schools of rural areas.

DELIMITATION OF THE STUDY

1. The study is restricted to Kota division, Rajasthan.
2. The study is delimited to the pre-primary government schools and private schools.
3. The study is delimited to the boys and girls of 3-6 yrs of government school and private school.

4. The study has been delimited to a sample of 500 students selected randomly from the 10 Govt. and 10 Private preprimary schools of rural and urban areas under Kota district.

METHOD OF RESEARCH STUDY:

Method is a style of conducting a research work which is determined by the nature of the problem. The selection of right method is the most important need for the success of any research study. The combination of three methods- **Survey, Experimental and Observation** method has been employed for this study.

POPULATION AND SAMPLE:

The population for this study consists of 10 government and 10 private preprimary schools of urban and rural areas of Kota district in Rajasthan. 500 students of government and private preprimary schools of urban and rural areas have been taken as sample to find the results of this study religiously. 250 students have been chosen from government preprimary schools of urban and rural areas. Another 250 students have been chosen from private preprimary schools of urban and rural areas. The selection of the students has been done by **lottery method** in

Random sampling technique.

TOOLS USED IN THE STUDY

(i) **Anthropometric Test (Standardized test) by Alphonse Bertillon**

This test has been used for measuring the physical development of the students of pre-primary schools. The researcher has taken three parameters of this test- Height, weight and BMI.

(ii) **Bhatia Battery Test (Standardized test) by C.M Bhatia**

This test is used for determining the cognitive development of the students of pre-primary schools. It is a combination of five sub batteries. maximum score of this test is 95.

(iii) **Eyberg Child Behavior Inventory (Standardized test) by Sheila Eyberg**

This test was used to determine the social development of students studying in preprimary schools. It is a rating inventory on the scale of 1-5. There are total 36 items in this inventory to measure the intensity of the problem.

(iv) **Curriculum, infrastructure and teacher quality Self made test**

To determine the effect of curricular and extra-curricular activities, infrastructure and school facilities and the quality of teachers on the development of the students studying in pre-primary school, a self made test that has been verified by other experts has been used. This questionnaire has 36 questions under these three categories. The questions are 'yes/no' types and each yes scores 1 mark and no scores 0. The reliability of this tool has been tested by split half method and was found 0.87.

STATISTICS USED IN THE STUDY :

1. Mean
2. Standard deviation
3. t-test
4. Correlation coefficient (Product moment)

STUDY OF RELATED LITERATURE :

The researcher has included the study of the related literature from the following sources:

1. Study of 10 international level books and journals related to the various variables.
2. Study of 16 national level books related to the physical, cognitive and social development.
3. Study of 4 national level book and newsletters for preprimary education and its current state in Rajasthan and other states.
4. Study of around 8 national level books and journals for curriculum, infrastructure and teacher quality.

CONCLUSION OF THE RESEARCH :

- There is significant difference between the height and weight of children of govt. and private preprimary schools of urban and rural areas but there is no significant difference between the body mass index (BMI) of children of urban and rural schools. It reveals that the students of private preprimary schools of urban and rural areas have better height and weight than that of govt. schools due to the better opportunities of physical activities in schools and good nutrition provided by the educated parents.
- The cognitive development of the students of private preprimary schools of urban and rural areas is better than that of govt. schools of urban and rural areas. It is probably because of the better academics and more opportunities to new knowledge in the private preprimary schools.
- The social development of the students of private preprimary schools of urban and rural areas is better than that of govt. schools of urban and rural areas. The social network formed from the literate parents, loving families and trained teachers provide them with ample opportunities to develop social awareness.
- There is significant effect of curricular and extracurricular activities; school infrastructure and classroom environment; and teacher quality on the development of the children studying in preprimary schools. The enriching curriculum, good physical condition of the school and the remarkable quality of teachers affect positively the understanding levels of children.
- There existed positive relation between the physical and cognitive; and physical and social development of students of govt. preprimary schools of urban areas. There existed no significant correlation between cognitive and social development of students of govt. preprimary schools of urban areas.
- There existed no significant correlation between the physical and cognitive; and cognitive and social development of students of private preprimary schools of urban areas. There existed moderate positive correlation between physical and social development of students of private preprimary schools of urban areas.
- There existed no significant correlation between the physical and cognitive development of students of govt. preprimary schools of rural areas. There

existed positive correlation between physical and social; and cognitive and social development of students of govt. preprimary schools of rural areas.

- There existed positive correlation between the physical and cognitive; and physical and social development of students of private preprimary schools of rural areas. There existed negative correlation between cognitive and social development of students of private preprimary schools of rural areas.

The major results and findings of this research study suggest that the holistic development of private schools is better than the govt. schools. The standard of preprimary education is still poor in rural areas in comparison to urban areas. The other factors like the curriculum, infrastructure and classroom environment and the quality of teachers directly affect the academic performance of children. The research report ends with few suggestions like efforts should be done to improve the access and quality of preprimary education in rural areas. The govt. preprimary schools of rural areas need to raise their standard in respect of their curriculum, school infrastructure, classroom environment and the quality of teachers. New technologies should be introduced to make teaching learning interesting for rural children. The infrastructure and the facilities should be attractive. The teachers should be strictly chosen on the basis of their training and teaching experience. Government should also take initiatives to enable the access of preprimary education to one and all, far and wide.

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CONTENTS OF ENGLISH PART - I

5. A Study of the Cognitive and Social Development of the Children Studying in Pre Primary Schools

Archana Sharma
Research Scholar, Univ. of Kota.

Introduction

Pre Primary Education can be defined as "a set of knowledge along with skills and experience as well as behavioral rules which provides the essential for coping successfully in everyday life and at school." Research suggests that pre-primary education is very important for the development of young children before they enter formal school **(Kaul, 2002)**.

Cognitive development refers to the development of thought processes, problem solving, memory and decision making. Preschoolers present an exquisite example of the manner in which children play an active role in their own cognitive development. They show their skill development in comprehending, explaining, organizing, manipulating, predicting and constructing. French psychologist **Jean Piaget** (1896-1980) gave the most accepted and influential theory of cognitive development.

Socialization is the most important feature of pre-school education. Children learn from each other through social interaction in a safe and monitored environment. The preschoolers become more independent and find their own way of playing. Family and its bonding are critical to the physical, mental, and social health of developing preschoolers.

Emergence of the Problem

Preschool education is the provision of education for children before the commencement of statutory education between the ages of three to six years **(Wikipedia, 2008).** Preschool education gives students a head start and prepares them for the challenges of primary school. The cognitive and social development of a child is directly related to the performance and academic achievement of the child. The preschool years are the years when nurturing and appropriate stimulation will reap lifelong benefits as children develop self-worth and a host of new skills that will serve them for a life time (www.aea.aide-et-action.org.com).

As it has been widely accepted that these early years are the most crucial ones when a child can gain maximum, I chose this particular age to delve deep into the process of education and understand the cognitive and social development of the preprimary children.

Objectives of the Research Study

1. To study the cognitive development of the children studying in govt. and private pre primary schools of urban areas.
2. To study the cognitive development of the children studying in govt. and private pre primary schools of rural areas.
3. To study the social development of the children studying in govt. and private preprimary schools of urban areas.
4. To study the social development of the children studying in govt. and private preprimary schools of rural areas.

Hypothesis of the Research Study

1. There is no significant difference between the cognitive development of the children studying in govt. and private pre primary schools of urban areas.
2. There is no significant difference between the cognitive development of the children studying in govt. and private pre primary schools of rural areas.
3. There is no significant difference between the social development of the children studying in govt. and private pre primary schools of urban areas.
4. There is no significant difference between the social development of the children studying in govt. and private pre primary schools of rural areas.

Delimitation of the Study

1. The study is restricted to Kota division, Rajasthan.
2. The study is delimited to the students of 3-6yrs.
3. The study is delimited to the pre-primary government schools and private schools.
4. This study is restricted only to the cognitive and social development of the children.

Method of the Research

In this research study, the researcher has used the experimental method and observation method to find the results.

Sample and Sampling Method

500 students of urban and rural preprimary schools have been taken as a sample. The children have been chosen from 10 govt. and 10 private preprimary schools. 250 students of govt. preprimary school and other 250 of private preprimary school form the sample for this study. A **random sampling technique** by lottery method was used to select schools and students for data collection.

Tools Used in This Study

1. Bhatia Battery Test (standardized test) by C.M Bhatia

This test is used for determining the cognitive development of the students of pre-primary schools. It is a combination of five sub batteries. The maximum score of this test is 95.

2. Eyberg child behavior inventory (standardized test) by Sheila Eyberg

This test is a rating scale that contains 36 items to test the frequency and intensity of the problem in the behavior of a child of 2-6 yrs.

Statistics Used in This Study

i. Mean

ii. Standard Deviation

iii. T-test

Data Analysis and Interpretation

Objective 1- To study the cognitive development of the children studying in govt. and private pre primary schools of urban areas.

Table-1

Significance of difference between mean cognitive development scores of urban govt. and private pre primary schools.

Variable	N	Mean (n)	S. D	t-value	Level of significance
Govt.	125	65	4.4	10.5	S
Private	125	71.3	5.3		.01

Df=248 .05 level of significance=1.97 .01 level of significance = 2.60

The above table shows that the mean cognitive development score of urban govt. and private pre primary schools is 65 and 71.3 and their standard deviation is 4.4 and 5.3 respectively. The obtained value of 't' is 10.5 which is higher than the table value of 't' at .01

level of significance for df 248 . Therefore there existed significant difference between the cognitive development of children studying in govt. and private pre primary schools of urban areas. Thus the null hypothesis of no significant difference is rejected.

Objective 2 - To study the cognitive development of the children studying in govt.and private preprimary schools of rural areas.

Table-2

Significance of difference between mean cognitive development scores of rural govt. and private pre primary schools.

Variable	N	Mean (n)	S. D	t-value	Level of significance
Govt.	125	63	4.9	4	S
Private	125	65	3.1		.01

Df−248 .05 level of significance=1.97 .01 level of significance = 2.60

The above table shows that the mean cognitive development score of rural govt. and private pre primary schools is 63 and 65 and the standard deviation is 4.9 and 3.1 respectively. The obtained value of 't' is 4 which is higher than the table value 2.60 of 't' at .01 level of significance for df 248 . Therefore there existed significant difference between the cognitive development of children studying in govt. and private pre primary schools of rural areas. Thus the null hypothesis of no significant difference is rejected.

Objective 3 - To study the social development of the children studying in govt. and private pre primary schools of urban areas.

Table 3

Significance of difference between mean social development scores of urban govt. and private pre primary schools.

Dependent variable	N	Mean (n)	S. D	t-value	Level of significance
Govt.	125	71.2	3.24	6.75	S
Private	125	73.9	2.54		.01

Df=248 .05 level of significance=1.97 .01 level of significance = 2.60

The above table shows that the mean social development scores of urban govt. and private pre primary schools are 71.2 and 73.9 and their standard deviation are 3.24 and 2.54

respectively. The obtained value of 't' is 6.75 which is higher than the table value 2.60 of 't' at .01 level of significance for df 248 . Therefore there existed significant difference between the social development of children studying in govt. and private pre primary schools of urban areas. Thus the null hypothesis of no significant difference is rejected.

Objective 4- To study the social development of the children studying in govt. and private pre primary schools of rural areas .

Table 4

Significance of difference between mean social development scores of rural govt. and private pre primary schools.

Dependent variable	N	Mean (n)	S. D	t-value	Level of significance
Govt.	125	69.6	2.79	9.1	S
Private	125	72.9	3.09		.01

Df=248 .05 level of significance=1.97 .01 level of significance = 2.60

The above table shows that the mean social development score of rural govt. and private pre primary schools is 69.6 and 72.9 and the standard deviation is 2.79 and 3.09 respectively. The obtained value of 't' is 9.1 which is higher than the table value 2.60 of 't' at .01 level of significance for df 248 . Therefore there existed significant difference between the social development of children studying in govt. and private pre primary schools of rural areas. Thus the null hypothesis of no significant difference is rejected.

Conclusion and Discussion of the Research Study

1. There is significant difference between the cognitive development of children studying in govt. and private pre primary schools of urban areas. Thus the null hypothesis of no significant difference is rejected. The children of private preprimary schools have better cognitive development than that of govt. schools. This is because of the better academics and more exposure to new knowledge in the private schools of urban areas.
2. There existed significant difference between the cognitive development of children studying in govt. and private pre primary schools of rural areas. Thus the null hypothesis of no significant difference is rejected. The children of private preprimary schools show better cognitive development than that of govt. schools of rural areas. The

private schools of rural areas have better infrastructure and good teacher quality which leads to the better cognitive development of the children studying there.

3. There is significant difference between the social development of the children studying in govt. and private pre primary schools of urban areas. Thus the null hypothesis that there is no significant difference between the social development of the children studying in govt. and private pre primary schools of urban areas is rejected The social development of the children studying in private pre primary schools is better than that of the children studying in govt.pre primary schools because of the better classroom environment.
4. There is significant difference between the social development of the children studying in govt. and private pre primary schools of rural areas. Thus the null hypothesis that there is no significant difference between the social development of the children studying in govt. and private pre primary schools of rural areas is rejected The social development of the children studying in private pre primary schools is better than that of the children studying in govt.pre primary schools because of the better congenial environment of the classroom.

Educational Implications

1. The schools of rural areas will become aware about the improvement of various areas in their schools to come at par with those of urban areas.
2. This study will focus on the need of good infrastructure and school facilities with proper hygienic environment for the positive impact on the development of students.
3. This study will help the parents to understand the meaning of cognitive and social development and will justify that pre-primary schooling can help the children attain them.
4. This research will also emphasize on the need to make provisions to enhance the cognitive and social aspect in pre-primary schools.

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CONTENTS

A study of the effect of curricular and extra-curricular activities; infrastructural facility and classroom environment; and teacher quality on the development of children studying in pre primary schools.

Prof. Lilesh Gupta
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J.L.N.T.T. College
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Kota

INTRODUCTION

Research suggests that pre-primary education is very important for the development of young children before they enter formal school (Kaul, 2002). The main factors that are responsible for the better preprimary education are curricular and extra-curricular activities; infrastructural facility and classroom environment; and the teacher quality of a school.

The main aim of curricular and extra-curricular activities is all round development of a child which includes physical, social, moral, intellectual and sensible development. Balance has to be maintained between syllabus, curriculum, books and also co-curricular activities beyond that. Co-curricular activities are the activities that go along the curricular activities. These activities are conducted out of the classroom to develop particular skills and non academic abilities like art, music, dance, drama etc School is second home to a children which caters all the important functions from boosting their confidence, providing them opportunities to perform to making them learn team work. The infrastructure plays a vital role in the development of a child. DANIEL RIVERA, Social Development Project Director at CAF, Development Bank of Latin America, states "The improvement of the physical condition of schools is as closely related to learning as other educational inputs including home environment, motivation, good teachers, libraries or student services.' Researches and studies conducted to figure out the effect of infrastructure suggests that students studying in schools with poor infrastructure have lower achievement scores in comparison to the others studying in schools with good infrastructure.

Besides the curriculum and infrastructure, the quality of teachers for preprimary children is another important factor that directly shows its impact on the children at this early age. Various research studies Blair 2000b; Darling-Hammond 2000; Hanushek 1971, reveal that factors such as cognitive ability, subject matter knowledge, knowledge of teaching and learning, licensure, and teaching behaviors in the classroom are related to teacher quality and increased student achievement.

EMERGENCE OF THE PROBLEM

The main purpose of this research study is to understand the factors that influence the academic performance of the students in pre-primary schools in India.

Researches have proved that the students studying in preprimary schools with better infrastructure and teacher quality show better academic achievements in comparison to those who study in underprivileged schools.

This study will give me an opportunity to develop an insight of the important factors that promote the growth of a child physically, socially and intellectually. Many researches have been done in this field at higher levels of education but the preprimary level which lays the foundation of higher education for the child is left neglected in India. As it has been

widely accepted that these early years are the most crucial ones when a child can gain maximum, I chose this particular age to delve deep into the process of education and understand the factors that affect the development of the preprimary children.

Therefore I chose this topic to affect and improve preprimary education in India.

OBJECTIVES OF THE RESEARCH STUDY

1. To study the effect of curricular and extra-curricular activities to support the development of children studying in pre primary schools.
2. To study the effect of infrastructural facility and classroom environment to support the development of children studying in pre primary schools.
3. To study the effect of teacher quality to support the development of children studying in pre primary schools.

HYPOTHESIS OF THE RESEARCH STUDY

1. There is no significant effect of curricular and extra-curricular activities on the development of children studying in pre primary schools.
2. There is no effect of infrastructural facility and classroom environment on the development of children studying in pre primary schools.
3. There is no effect of teacher quality on the development of children studying in preprimary schools.

DELIMITATION OF THE STUDY

1. The study is restricted to Kota division, Rajasthan.
2. The study is delimited to the students of 3-6yrs.
3. The study is delimited to the pre-primary government schools and private schools.

METHOD OF THE RESEARCH

In this research study, the researcher has used the survey and observation method to collect the data.

SAMPLE AND SAMPLING METHODS

The children have been chosen from 10 govt. and 10 private preprimary schools. In total 500 students of urban and rural preprimary schools have been taken as a sample. 250 students of govt. preprimary schools and 250 of private preprimary schools form the sample for this study. A random sampling technique by lottery method was used to select schools and students for data collection.

TOOL USED IN THIS STUDY

Questionnaire for curriculum, infrastructure and teacher quality (Self made tool)

A self made questionnaire has been used to measure the effect of curricular and extra-curricular activities; infrastructural facility and classroom environment; and teacher quality on the development of children studying in pre primary schools. The tool has been made on these three parameters and contains 36 questions. The first parameter of curricular and extra-curricular activities has 10 questions, the second parameter of infrastructural facility and classroom environment has 12 questions and the third parameter of teacher quality contains 14 questions. The questions are 'Y/N' type and each 'yes' is of 1 mark and 'no' is of 0 mark. The maximum score is 36. The reliability of this tools was found 0.86 when tested by Half-split method. The face and content validity was observed for the validity of the test.

STATISTICS USED IN THIS STUDY

(i) Mean (ii) Standard Deviation
(iii) t-test

DATA ANALYSIS AND INTERPRETATION

Objective 1 - To study the effect of curricular and extra-curricular activities to support the development of children studying in pre primary schools.

Table 1

Significance of difference between the mean scores of development of the children studying in preprimary schools of good and poor curricular and extra-curricular activities

Variable	N	Mean (n)	S.D	t-value	Level of significance
Good	325	7.3	0.9	12.8	Sat .01 level
Poor	175	6-4	0.8		

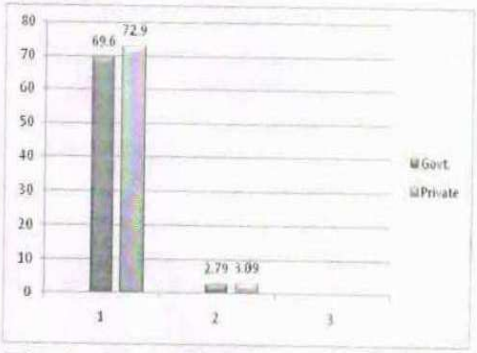
Df=498 .05 level of significance=1.97
.01 level of significance=2.59

It can be observed from the above table that the mean of the development of children studying in preprimary schools with good and poor curricular and extra-curricular activities is 7.3 and 6.4 and their standard deviation is 0.9 and 0.8 respectively. The obtained value of 't' is 12.8 which is higher than the table value 2.59 of 't' at .01 level of significance for df 498. Thus the null hypothesis that there is no significant effect of curricular and extra-curricular activities on the development of children studying in pre primary schools is rejected.

Therefore it revealed that there is significant effect of curricular and extra-curricular activities on the development of children studying in pre primary schools.

Graph-1

Graph representing the mean and S.D of development of the children studying in preprimary schools of good and poor curricular and extra-curricular activities.



Objective 2 - To study the effect of infrastructural facility and classroom environment to support the development of children studying in pre primary schools.

Table 2

Significance of difference between the mean scores of development of the children studying in preprimary schools of good and poor infrastructural facility and classroom environment

Variable	N	Mean (n)	S.D	t-value	Level of significance
Good	280	8.9	1.13	13.3	S at .01 level
Poor	220	7.7	1.10		

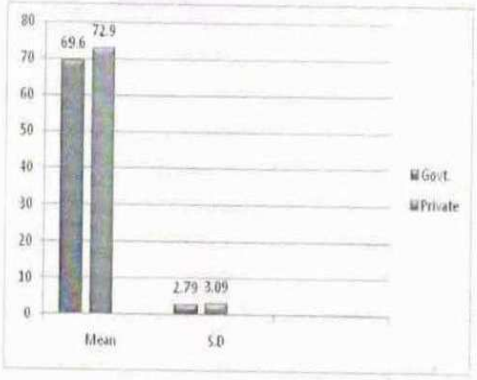
Df=498 .05 level of significance=1.97 .01 level of significance=2.59

It can be observed from the above table that the mean of the development of children studying in preprimary schools with good and poor infrastructural facility and classroom environment is 8.9 and 7.7 and their standard deviation is 1.13 and 1.10 respectively. The obtained value of 't' is 13.3 which is higher than the table value 2.59 of 't' at .01 level of significance for df 498. Thus the null hypothesis that there is no significant effect of infrastructural facility and classroom environment on the development of children studying in pre primary schools is rejected.

Therefore it can be said that there is significant effect of infrastructural facility and classroom environment on the development of children studying in pre primary schools.

Graph 2

Graph representing the mean and S.D of development of the children studying in preprimary schools of good and poor infrastructural facility and classroom environment



Objective 3- To study the effect of teacher quality to support the development of children studying in pre primary schools.

Table 3

Significance of difference between the mean scores of development of the children studying in preprimary schools of good and poor teacher quality.

Variable	N	Mean (n)	S. D	t-value	Level of significance
Good	290	10.7	1.74	11.42	S at .01 level.
Poor	210	9.1	1.80		

Df=498 .05 level of significance=1.97

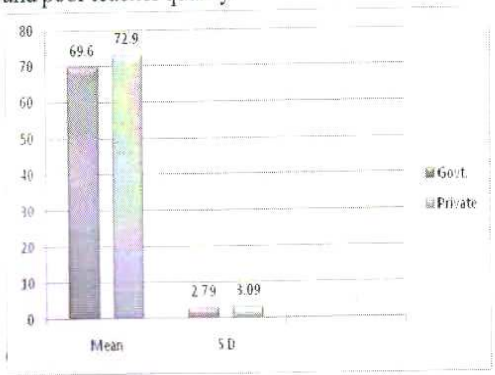
.01 level of significance=2.59

It can be observed from the above table that the mean of the development of children studying in preprimary schools with good and poor teacher quality is 10.7 and 9.1 and their standard deviation is 1.74 and 1.80 respectively. The obtained value of 't' is 11.42 which is higher than the table value 2.59 of 't' at .01 level of significance for df 498. Thus the null hypothesis that there is no significant effect of teacher quality on the development of children studying in pre primary schools is rejected.

Therefore it can be said that there is significant effect of teacher quality on the development of children studying in pre primary schools.

Graph 3

Graph representing the mean and S.D of development of the children studying in preprimary schools of good and poor teacher quality.



RESEARCH STUDY

1. The development of the children studying in pre primary schools with good curricular and extra-curricular activities is better than that of the children studying in pre primary schools with bad curricular and extra-curricular activities. The good curricular and extra-curricular activities provide wide exposure to the children and support the overall development of the children whereas the poor curricular and extra-curricular activities fail to do so.
2. The development of the children studying in pre primary schools with good infrastructure is better than that of the children studying in pre primary schools with poor infrastructure. The good infrastructural facility and classroom environment plays an important role in the overall development of the children of pre primary schools.
3. The development of the children studying in pre primary schools with good teachers is better than that of the children studying in pre primary schools with poor teachers. The good teaching skills and behavior of a teacher play an important role in the overall development of the children of pre primary schools.

EDUCATIONAL IMPLICATIONS

1. The schools of rural areas will become aware about the improvement of various areas in their schools to come at par with those of urban areas.
2. This study will focus on the need of good infrastructure and school facilities with proper hygienic environment for the positive impact on the development of students.
3. The role of teachers with efficient teaching skills and good conduct directly affects the development of the children. Therefore this study will inspire the school authorities not to compromise with the teacher quality.
4. This study will help the parents to understand the various parameters of judging the right school for their children at preprimary level and will justify that pre-primary schooling can help the children attain them.

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1. Ashok Kumar Jha, et. al. (2004). "Status of Co - Curricular and Extracurricular Activities in Primary Schools of Nepal : Problems and Prospects" Tribhuvan University.

2. Ashok Kumar Jha, et. al. (2004). "Status of Co - Curricular and Extracurricular Activities in Primary Schools of Nepal : Problems and Prospects" Tribhuvan University.

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Phone : 9414742973, 8209610176

Reference SEIC/2020/1-12

Letter of Appreciation

Date 10-07-2020

Archna Sharma

I would like to take this opportunity to express my gratitude for sharing your knowledge and experience through the Research Paper/Article titled **" A study of the effect of curricular and extra-curricular activities; infrastructural facility and classroom environment; and teacher quality on the development of children studying in pre primary school"** that was published in **Vol. 8 Issue 31 Apr.-Jun. 2020 of CHHAVI National Journal of Higher Education (ISSN : 2319-9679)**

The entire editorial board has asked me to convey its appreciation for your fabulous contribution and the support that you gave us in making this issue a success. It was an enlightening experience process for our team and readers.

Thank you once again. Looking forward to have more of your contributions in times to come for future issues.

With sincere and copious regards,

Dr. Rajendra Shrimali
Chief Editor

Shubham Education Information Centre Authorised Signature Bikaner

Date :- 10-07-2020

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CERTIFICATE

CERTIFICATE

National Seminar

on

CHALLENGES OF TEACHER EDUCATION IN THE PRESENT SCENARIO

APRIL 26-27, 2014

Bhagwati Shikshak Prashikshan Mahavidyalya

Gangapur City, Distt.-Sawai Madhopur (Rajasthan)
(NAAC Accredited at B Grade)

Certified that Prof./Dr./Mr./Ms. Archana Sharma

of University of Kota, Kota participated in the

National Seminar and presented a paper entitled Technology in Education and Teaching

Date : 27th April, 2014

(Dr. Krishna Kant Sharma)
Organising Secretory

(Dr. Anuj Kumar Sharma)
Seminar Director

Jawaharlal Nehru Post Graduate Teacher's Training College

Sakatpura, Kota-324008 (Raj.)

Recognized by N.C.T.E. & Affiliated to university of Kota, Kota

Estd. 1964

National Seminar

जीवन निर्माण में मूल्य एवं शिक्षा की भूमिका

06-07 March, 2017

Certificate

This is to certify that Prof. / Dr. / Mr. / Ms. ...Archana Sharma (R. Scholar)

of ...University of Kota, Kota... has

Participated / Presented a paper / Chaired the Session.

Title of Paper : जीवन निर्माण में मूल्य एवं शिक्षा की भूमिका

Dr. Sapna Joshi
Co-Coordinator

Prof. Sushma Singh
Principal & Coordinator

Smt. Mamta Sharma
Chairman

VARDHMAN MAHAVEER OPEN UNIVERSITY, KOTA

Rawatbhata Road, Kota (Raj.)

One Day

National Symposium

On

Gandhian Philosophy & Present Educational Scenario

November 19, 2019

This is to certify that Prof./Dr./Mr./Ms Archana Sharma (R. Scholar) **actively participated in the One Day National Symposium on "Gandhian Philosophy & Present Educational Scenario "on November 19, 2019 organized by Vardhman Mahaveer Open University, Kota as a Delegate/Keynote Speaker/ Chairperson of a session.**

Prof. (Dr.) R. L. Godaraa
(Vice- Chancellor)

Dr. Anil Kumar Jain
(Convener)

Dr. Keerti Singh
(Organizing Secretary)

Kautilya

WOMEN T.T. COLLEGE

N.H. 27 By-Pass, Rawatbhata Road, Nayagaon, Kota - Pin 324010 (Raj.)

NATIONAL SEMINAR

ON

"CREATIVE & EMPIRICAL EDUCATION OF MAHATMA GANDHI (NAI TALIM)"

20th & 21st December 2019

Certificate

This is to certify that Mr./Mrs/Dr. ARCHANA SHARMA [RE. SCHOLAR]

Participated in the NATIONAL SEMINAR ON THEME " CREATIVE & EMPIRICAL EDUCATION OF MAHATMA GANDHI (NAI TALIM) " He/She also present a paper on TEACHING & LEARNING RELATION SHIPS

Mrs. Tabassum Pathan
Managing Director

Dr. Sushma Singh
Dean ,Faculty of Education
University of Kota, Kota

Dr. M.K. Upadhyay
Principal

ANNEXURES

ANNEXURES

ECBI™ Eyberg Child Behavior Inventory™

Parent Rating Form by Sheila Eyberg, PhD

Your Name _____ Relationship to Child _____ Today's Date ___/___/___

Child's Name _____ Child's Gender _____ Child's Date of Birth ___/___/___

Directions: Below are a series of phrases that describe children's behavior. Please (1) circle the number describing **how often** the behavior **currently** occurs with your child, and (2) circle either "yes" **or** "no" to indicate whether the behavior is **currently a problem for you**.

For example, if seldom, you would circle the 2 in response to the following statement:

	Never	Seldom	Sometimes	Often		Always	Is this a problem for you?
1. Refuses to eat vegetables	1	(2)	3	4	5	6	7	YES (NO)

Circle only one response for each statement, and respond to all statements. **DO NOT ERASE!** If you need to change an answer, make an "X" through the incorrect answer and circle the correct response. For example:

1. Refuses to eat vegetables	1	(2)	(X)	4	5	6	7	YES (NO)

	How often does this occur with your child?							Is this a problem for you?	
	Never	Seldom		Sometimes	Often		Always		
1. Dawdles in getting dressed	1	2	3	4	5	6	7	YES	NO
2. Dawdles or lingers at mealtime	1	2	3	4	5	6	7	YES	NO
3. Has poor table manners	1	2	3	4	5	6	7	YES	NO
4. Refuses to eat food presented	1	2	3	4	5	6	7	YES	NO
5. Refuses to do chores when asked	1	2	3	4	5	6	7	YES	NO
6. Slow in getting ready for bed	1	2	3	4	5	6	7	YES	NO
7. Refuses to go to bed on time	1	2	3	4	5	6	7	YES	NO
8. Does not obey house rules on own	1	2	3	4	5	6	7	YES	NO
9. Refuses to obey until threatened with punishment	1	2	3	4	5	6	7	YES	NO
10. Acts defiant when told to do something	1	2	3	4	5	6	7	YES	NO
11. Argues with parents about rules	1	2	3	4	5	6	7	YES	NO
12. Gets angry when doesn't get own way	1	2	3	4	5	6	7	YES	NO
13. Has temper tantrums	1	2	3	4	5	6	7	YES	NO
14. Sasses adults	1	2	3	4	5	6	7	YES	NO
15. Whines	1	2	3	4	5	6	7	YES	NO
							Page 1 subtotals		

OVER →

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	How often does this occur with your child?							for you?	
	Never	Seldom		Sometimes		Often	Always		
16. Cries easily	1	2	3	4	5	6	7	YES	NO
17. Yells or screams	1	2	3	4	5	6	7	YES	NO
18. Hits parents	1	2	3	4	5	6	7	YES	NO
19. Destroys toys and other objects	1	2	3	4	5	6	7	YES	NO
20. Is careless with toys and other objects	1	2	3	4	5	6	7	YES	NO
21. Steals	1	2	3	4	5	6	7	YES	NO
22. Lies	1	2	3	4	5	6	7	YES	NO
23. Teases or provokes other children	1	2	3	4	5	6	7	YES	NO
24. Verbally fights with friends own age	1	2	3	4	5	6	7	YES	NO
25. Verbally fights with sisters and brothers	1	2	3	4	5	6	7	YES	NO
26. Physically fights with friends own age	1	2	3	4	5	6	7	YES	NO
27. Physically fights with sisters and brothers	1	2	3	4	5	6	7	YES	NO
28. Constantly seeks attention	1	2	3	4	5	6	7	YES	NO
29. Interrupts	1	2	3	4	5	6	7	YES	NO
30. Is easily distracted	1	2	3	4	5	6	7	YES	NO
31. Has short attention span	1	2	3	4	5	6	7	YES	NO
32. Fails to finish tasks or projects	1	2	3	4	5	6	7	YES	NO
33. Has difficulty entertaining self alone	1	2	3	4	5	6	7	YES	NO
34. Has difficulty concentrating on one thing	1	2	3	4	5	6	7	YES	NO
35. Is overactive or restless	1	2	3	4	5	6	7	YES	NO
36. Wets the bed	1	2	3	4	5	6	7	YES	NO

Page 2 subtotals		
Subtotals from page 1		

Scores	Raw score	T score	Exceeds Cutoff (✓)
Intensity			
Problem			

Comments:

DR. C. M. BHATIA'S
BATTERY OF PERFORMANCE TESTS OF INTELLIGENCE

Name of the subject _____ Place _____

Father's Name _____ Date _____

Time _____

Date of birth of the subject from official Records _____

Estimate age of the subject _____ Years _____ Month

Whether Literate or Illiterate _____

(If Literate, class in which he is reading or has read)

Father's occupation (or the subject's occupation) _____ Caste _____

General opinion about the subject's intelligence. ⊙ Very superior ⊙ Superior ⊙ Average ⊙ Inferior — ⊙ Very Inferior

(If reading in school, position in class)

Any particular emotional tendency noticed during the test :—

TEST I. — KOHS BLOCK DESIGN TEST

Design No.	Time taken in mts. & seconds.	Success or failure	Any remarks.
1 (Practice)			
2			
3			
4			
5			
6			
7			
8			
9			
10			

TEST II. — PASSALONG TEST

Design No.	Time taken in mts. & seconds.	Success or failure	Any remarks.
1 (Practice)			
2			
3			
4			
5			
6			
7			
8			

[P. T. O.

Pattern No.	Time taken in mts. & seconds.	Success or failure	Any remarks.
1 (Practice)			
2			
3			
4			
5			
6			
7			
8			

TEST IV. — IMMEDIATE MEMORY TEST

	Span		Span
For Sounds		For Digits	
For Reversed Sounds		For Reversed Digits	

TEST V. — PICTURE CONSTRUCTION TEST

Picture No.	Time taken in mts. & seconds.	Success or failure	Any remarks.
1 (Practice)			
2			
3			
4			
5			

(*Signature of Examiner*)

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100 × 500—20-3-65.

1. Information provided by you will be used for research purpose only and not for other else.
2. Please give correct answers of all the questions. Impartial information given by you will affect the quality of research study.

Prof. Lilesh Gupta
Research Supervisor

Archana Sharma
Research Scholar

Basic Information

Please fill the following information (कृपया निम्न सूचनायें देवें):-

Name (नाम)..... .....

Age (आयु)..... Sex (लिंग): Male/ Female ....

Date of Birth (जन्म तिथि).....Birth Order .....

Religion.....

No. of Siblings (भाई बहन की संख्या).....Type of Family.....

Father's Name (पिता का नाम).....Occupation (व्यवसाय).....

Mother's Name (माता का नाम).....Occupation (व्यवसाय).....

Permanent Address (स्थायीपता) .....

.....

Residential Address (निवास)..... .....

.....

Phone No (फोन न.)..... .....Mo. No (मोबाईल न.)..... .....

Specific Information (विशेष सूचना)

Anthropometric-Weight (वजन)... ...Kgs. Height (उचाई)... Inches BMI .....

MUAC*.....inches TSFT**.....inches

Blood Group..... .....Anemic----Y/Hemoglobin (Hb).....

Skin Color.....

Health Problem due to lack of nutrition if any related to Skin, Hair, Backache, Eyes.....

Other information if any.....

MUAC*-Mid upper Arm Circumference TSFT**-Triceps Fold Thickness

QUESTIONNAIRE

1. Information provided by you will be used for research purpose only and not for other else.
2. Please tick t (true) or f(false) for all the questions .

Basic Information

Please fill the following information (कृपया निम्न सूचनायें देवें):-

Name (नाम)…… ……

Age (आयु)…..... Sex (लिंग): Male/ Female ……

Father's Name (पिता का नाम)……Occupation (व्यवसाय).....

CURRICULAR AND EXTRA CURRICULAR ACTIVITIES

(To be asked by teachers)

1. Is GK taught to the students?	(Y / N)
2. Do the students have games period every week?	(Y / N)
3. Do the students have drawing/craft period every week?	(Y /N)
4. Do they learn music and dance in the school?	(Y / N)
5. Do they learn recitation in the school?	(Y /N)
6. Do they have dramatization in the school?	(Y/N)
7. Is story telling done in the schools?	(Y /N)
8. Are the religious and national festivals celebrated in the school ?	(Y/ N)
9. Are the students involved in annual function of the school?	(Y/ N)
10. Do the students have pool parties and picnics?	(Y/N)

INFRASTRUCTURE AND CLASSROOM ENVIRONMENT

(To be observed)

11. Do the students have classrooms to sit?	(Y / N)
12. Do the students sit on furniture in the classroom?	(Y/N)
13. Is the furniture comfortable and attractive for the kids?	(Y/N)
14. Is white board and marker used for teaching?	(Y/ N)
15. Is there an interactive white board in classrooms to show the presentations?	(Y/N)

16. Is there an A .C in the classroom? (Y/N)

17. Is the classroom big and airy with proper natural light? (Y /N)

18. Are there clean and hygienic washrooms in the school? (Y /N)

19. Is there clean and potable water in the school? (Y/N)

20. Does the school have proper playground and activity area? (Y/N)

21.Is there enough number of toys and puzzle games for the kids? (Y/N)

22. Is there enough number of helpers to assist the kids for their needs? (Y/N)

TEACHER QUALITY

(To be asked by students)

23. Do you like your teachers? (Y/N)

24. Are the teachers polite and loving to you? (Y /N)

(To be observed)

25. Do the teachers have good communication skills? (Y/N)

26. Do the teachers use teaching aids in the class? (Y/N)

27. Are the teachers presentable and attractive ? (Y/N)

28. Are the teachers cool towards the students ? (Y/N)

29. Do the teachers pay individual attention on each student? (Y/N)

30. Are the teachers trained and qualified? (Y/N)

31. Are the students able to identify simple digits, alphabets and Hindi letters? (Y/N)

32. Are the students able to do simple calculations of one and two digits? (Y /N)

33. Are the students able to understand simple instructions given in English? (Y/N)

34. Are the students able to take dictation of simple words? (Y /N)

35. Do the teachers make proper use of blackboard? (Y/N)

36. Do the teachers use some teaching aid to explain the concept? (Y/N)