

Develop a Framework of Physical Features of Kindergarten Environment a Study of Existing Physical Environment in Kindergarten School – Case Study of Jamshoro

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Abstract - Back in the day, kindergarten was linked with colourful paints, clay, building blocks, musical instruments, booming enthusiasm, and in-depth study. Today, kindergarteners are expected to study content that was previously reserved for first grade. For this research, Jamshoro is selected which is commonly known as ‘Education City’. The results showed that there is high importance of proper physical activity area to be planned for kids in school. The results also revealed that poor outdoor spaces can lead to stress and anxiety. The implication of this study could be used by architects and designers for revising their plans of kindergarten schools.

Keywords: Kindergarten school; physical environment; open spaces; activity areas; preschoolers.

I. INTRODUCTION

Building, occupant needs, and environmental factors are all integrated during the meticulous process of architectural design. Since this process is so important for the early development of students' bodies and stamina, kindergarten students need special attention.[1] The structure that meets the needs of its occupants, especially in educational structures like schools for younger pupils, where the design has a direct impact on how well children learn. [2] Due to the need of providing adequate room for developing children to engage in physical activity in order to prepare their bodies for the coming stages, kindergarten school buildings should pay special attention to physical features as well features for both students and teachers. [3]

Dramatic changes occur both at the level of the individual and the context during the transition to school kids from various cultures gain progressively complex social and mental skills throughout the developmental phase called the 5 to 7 years shift. [4]

Making sure that every kid has the right to attend a kindergarten that not only focuses on studies but also on a child's physical growth makes it possible to provide children a positive, early understanding of school by adopting developmentally appropriate techniques. [5]

In designing a kindergarten building, minimum consideration is given to parks, playground, open spaces, and views. Though, open spaces are our primary means of communication with the outside world. [6] They play the part of developing connection with the outside world by being the source of physical activity, receiving of sunlight, fresh air, connection with nature, and aesthetics. [7] When parks are designed on a building, they also help enhance the building's aesthetics. [8]

II. PROBLEM STATEMENT

The most undervalued element of building architecture is the open spaces. [9] The concentration of parks, outdoor play areas, and open interacting places is done with the bare minimum of design attention. [10]

The major problems of the kindergarten school buildings cannot be neglected as colorful walls cannot provide healthy body to students, congested and overcrowded classrooms raising the risk of several mental disorders and no crossing of fresh air results in lazy students. [11]

People are unaware of the fact that,

- i. This will affect a child behavior, living standards and built environment
- ii. High negative impact on growing child's physical and mental health
- iii. Less connection with nature will result in allergic kids

The horizontality is changing into verticality which is resulting in more enclosed spaces.[12] The change in

educational building architecture will also change the behavior of people and kids and creating new problems[13] i.e. hiding of sun and light, ventilation and lack of open spaces. [14] Such changes will create ever lasting effect on a child’s emotional and psychological well-being. [15]

2.1 Objectives

For achieving the aim the following objectives should be focused,

- i. To investigate the impact of confined environments on the behaviour of kindergarten pupils in Jamshoro.
- ii. To provide basic physical activity environment that will help to control obesity in young children.
- iii. To determine the impacts of outdoor play and screen time on preschoolers.

2.2 Research methodology

As this research is a case study, the methodology applied was more on gathering information through surveys, questionnaire, interviews and physical visits. This primary data was then compared with the review which included impacts on pupils overall health due to improper physical features planned in kindergarten schools.

There were mainly three types of methods being used for collecting primary data:

- Collecting primary data through questionnaire surveys
- Collecting primary data through site visits
- Collecting primary data through interviews conducted from parents, students, teacher and management of school[16]

Case studies are carried out for collecting secondary data

In gathering primary data, questionnaire surveys, site visits and interviews conducted from school management and parents are conducted, in order to demonstrate a sampling size data to be collected, then questionnaires were distributed to parents whose children are attending kindergarten with improper designing along with that interviews are conducted for their expectation for kindergarten school.

In these three approaches important information was collected related to the context of study after collection primary data, secondary data was collected through literature review and case studies.

2.3 Method of data analysis

Data collection through questionnaire forms and then examine by comparing it with stress and anxiety level in

students after returning from school to analyze the existing condition of the study area, Develop a framework of physical features of kindergarten environment which is a study of existing physical environment in kindergarten school. The questionnaire is arranges in series to analyze data. It is categorized according to the research question to find accurate result of the research. For analyzing the data, descriptive statics and correlation method used to summarize the photographs. The data is definite, the frequencies or correlation procedure was used and data is analyzed through descriptive method. [17]

III. RESULTS AND DISCUSSION

What Is Kindergarten School To You?

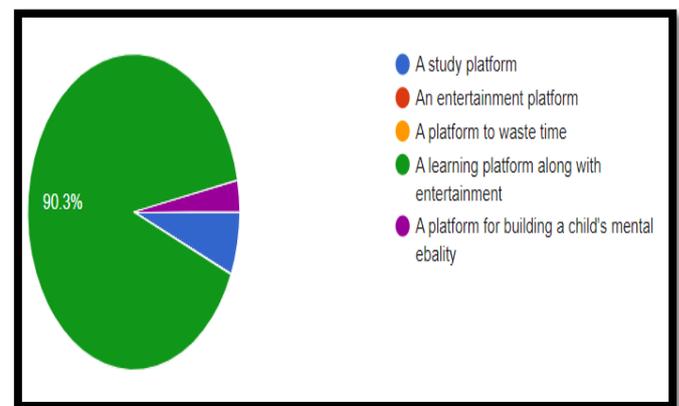


Figure 1: Data analyzed through questionnaires for obtaining results about what is kindergarten school

Is There Any Impact Of Confined Environments On The Behavior Of Kindergarten Pupils?

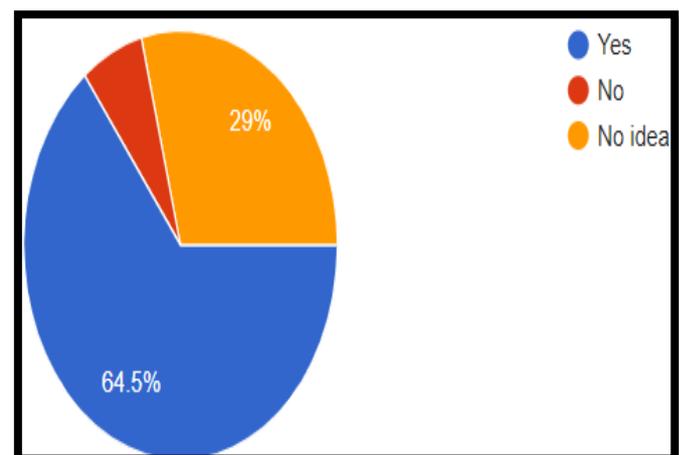


Figure 2: Data analyzed through questionnaires for obtaining results about any impact of confined environments on the behavior of kindergarten pupils

How Your Child Behaves If He's Taken To A Park Nearby For 20 Minutes?

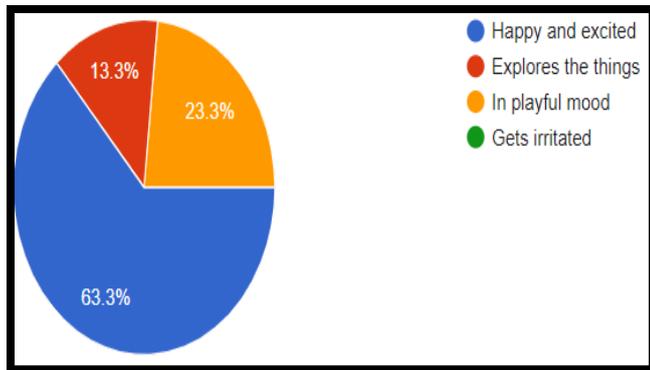


Figure 3: Data analyzed through questionnaires for obtaining results about how a child behaves if he's taken to a park nearby for 20 minutes

Do You Think No Physical Or Outdoor Activity Is The Reason For Obesity In Young Child?

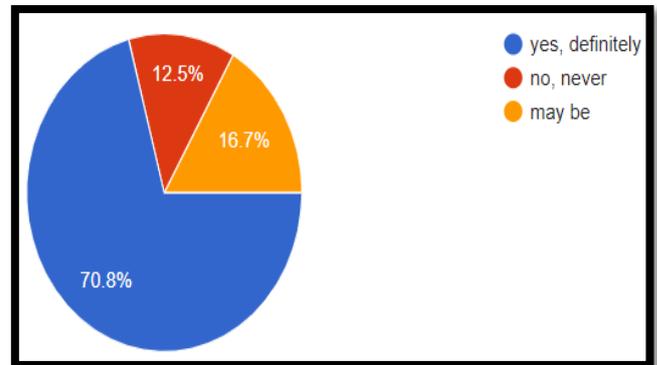


Figure 6: Data analyzed through questionnaires for obtaining results about no physical or outdoor activity is the reason for obesity in young child

What Do You Think About Providing Play Spaces For Toddlers In Schools?

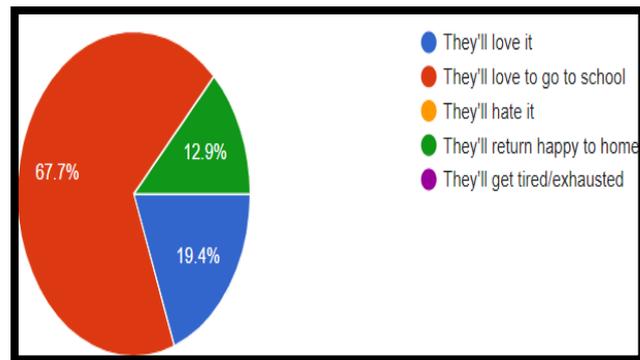


Figure 4: Data analyzed through questionnaires for obtaining results about providing play spaces for toddlers in schools

What Kind Of Activities Can Keep A Child Active And Control Obesity?

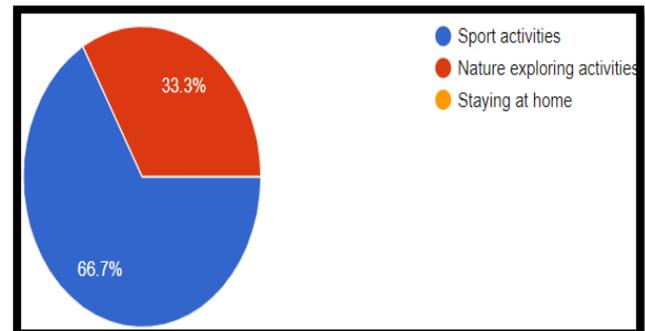


Figure 7: Data analyzed through questionnaires for obtaining results about activities that can keep a child active and control obesity

What Would Be Impact Of A Kindergarten School Which Provides Outdoor Play Activities?

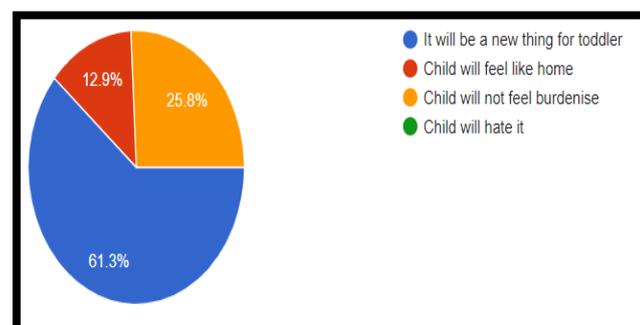


Figure 5: Data analyzed through questionnaires for obtaining results about impact of a kindergarten school which provides outdoor play activities

Are You Aware Of Obesity Related Health Problems?

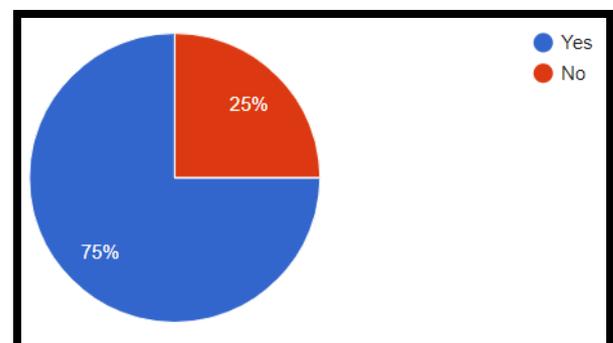


Figure 8: Data analyzed through questionnaires for obtaining results about awareness regarding to obesity related health problems

How Can Obesity In A Child Be Controlled?

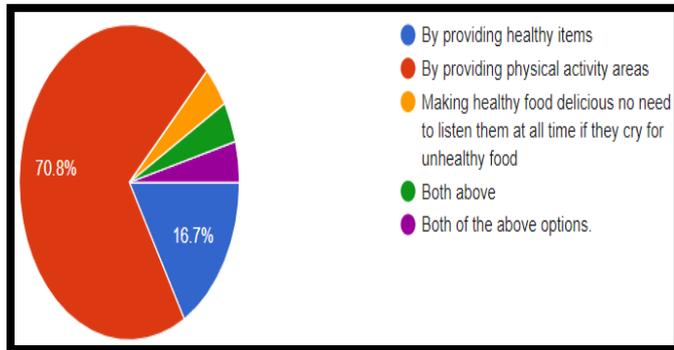


Figure 9: Data analyzed through questionnaires for obtaining results about how to control obesity

How Kindergarten Schools At Jamshoro Are Serving?

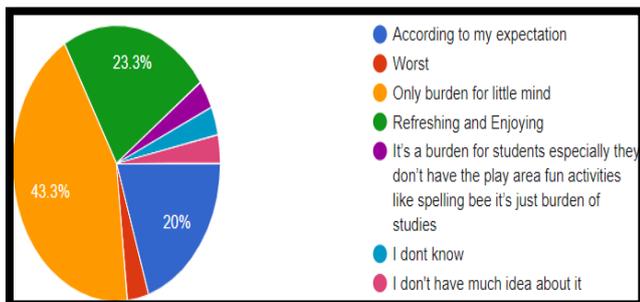


Figure 10: Data analyzed through questionnaires for obtaining results about how kindergarten schools at Jamshoro are serving

Through the analysis obtained data, it was assessed that a kindergarten school is a learning platform along with entertainment; kindergarten is not basically a place to study but to explore a new environment along with all the activities to keep the child fit physically and mentally, there is effect of open spaces on student's overall health and mentality, taking a child to park for 20 minutes enhance his mood as he becomes happy and excited, play spaces should be provided for toddlers in school, kindergarten schools in Jamshoro are only a burden for little mind, providing outdoor play area in kindergarten would be a new thing for toddler, no physical or outdoor activity is the reason for obesity in young children to control obesity physical activity is the only solution to be provided. [18]

IV. CONCLUSION

The author suggests that the kindergarten school building should be developed in such a way that it included proper outdoor space for physical activities. Enclosed rooms and indoor screen times cannot help a growing child to explore the world outside. Kids under the age of 6 needs to explore see and experience the outside world on their level therefore

properly planned outdoor physical environment can provide the child opportunity to see the world from their perspective.

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