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Children's Drawing Interpretation to Build a Healthier Environment

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Abstract: ***Children are usually shy by nature and find verbal expression far more difficult; therefore, interactive drawing exercises can be completed quickly, easily, and in an pleasant way to get the thoughts of the children for developing their neighborhood. They can draw easily. Therefore, their views about their surrounding environment can be interpreted by observing their drawings. The research aims to get the aspirations of the children about their neighborhood through the drawings made by them. A total of 200 children were asked to make drawings of the neighborhoods in which they live and they were asked to give their views about further improvements in the neighborhood. Drawings of the children were analyzed by a panel of child psychologists through content analysis. Generally, adults see children as shy and treat them lightly, but drawings depict that they underestimate them. The findings inferred that children are very intelligent and give much weight to their surrounding environment. The result shows that children demand qualitative spaces in the neighborhood for their overall development.***

Keywords: children's drawings, drawing skills, neighborhood environment

I. INTRODUCTION

Expression is one of the major needs of the human race. Different individuals of different age brackets use different tools to express themselves. As Benjamin Franklin, Founding Father of the United States has said "Humans are animals who use tools", the tools humans can use according to their purpose and needs. These, tools which evolved for survival, eventually evolved into a medium to express and also enrich life. Human beings have, with potential to create, come to make tools according to the purpose. The tools are advanced to become easier to use in the friendly way, they lead to not only being used for the existence but also to the act of "drawing pictures" to enhance the quality of the life. It is one of the easiest way of expressing themselves (Lewis & Greene,1983).

Children are usually shy by nature and find verbal expression far more difficult, and therefore, drawing tests can be completed quickly, easily, and in an enjoyable way (Lewis & Greene, 1983, Agarwal et.al, 2021). Children's drawings provide a 'window' into their thoughts and feelings, mainly because they reflect an image of his/her mind.

One can draw after observing the surroundings thus the drawings result from ‘visual methods”. Let us not forget that these were first – and predominantly – developed by environmental psychology researchers, in the same vein as the 'Place Perception Project' put in place by James Blaut and David Stea at Clark University in the 1970s. In this perspective, maps, aerial photographs, and sketch maps (produced by the children and analyzed according to the principles set out by Kevin Lynch in 1960) became special tools for analyzing the development of spatial awareness and the terms of spatial cognition amongst the children; they helped establish the variations in the environmental knowledge according to the children's age and sex, while bringing into question the Piagetist hypothesis of the stages of development of the child (Blaut and Stea 1971, Hart 1979, Matthews 1984, 1985, 1992). These methods were criticized due to the strictness with which the researchers controlled the protocols, which left very little room for the children to express themselves spontaneously, leading to adult-centered interpretations of the spatial representations of the children (Young and Barrett 2001, Literat, 2013). With the emergence of the sociological approach, the research has given greater weight to the perspectives of the children of their living space, to the sense and the values they attribute to the places, and to the kinds of bonds they feel; at the same time, it has brought to light the diversity of their experiences according to the socio-spatial context in which they find themselves (Aitken 1994, Holloway and Valentine, 2000). This trend has been accompanied by a diversification in the methods used in research with children, aiming to give the children the most varied and appropriate means to give their account of their interpretations of an area. Amongst the numerous methods used, the visual methods have pride of place, drawings, maps, photos, etc., often serving as a basis for individual and collective discussions (Young and Barrett 2001, Christensen and O’Brien 2003, Benekaret al. 2010)4.

The research shows that children's drawings are the best medium through which we can perceive the aspirations of children about their neighborhood easily.

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II. METHODOLOGY

To establish the aim, several studies were conducted at different levels, which included the study of previous research, published articles, and most importantly study of Children's Psychology to develop an understanding of children's Psychology.

As per the recommendations of the various researchers, the children belonging to the age group 6 and 15 years were selected for this research. The research kept this age group, as the children of this age can draw easily. A total of 200 children from four renowned schools in Lucknow were asked to make drawings of the neighborhoods in which they live and they were asked to give their views about further improvements in the neighborhood. Further, these drawings and their views were analyzed by a panel of child psychologists. The panel was constituted by selecting five child psychologists from Lucknow City, who have experience than twenty years.

III. LITERATURE SURVEY

A. Why do we need to interpret Children's Drawings?

Children are the future of any nation, and their vision plays a vital role in any matters related to them (UNICEF,1990; UNICEF, 2004). Since the 19th century, many scholars and researchers have been trying to interpret Children's drawings, the main reason for this kind of study has been in three categories, which cover aesthetic, educational, and clinical reasons. There are mainly only three different types of research into the emotional-expressive aspects of children's drawings(Farokhi &Hashemi,2011).

First, drawings were analyzed as manifestations of personality traits, interpreted mainly by Freud, within the theoretical framework of psychoanalytic theory and its derivatives. The second, identified largely in the work of Koppitz, attempted to devise and scientifically validate a classification of 'emotional indicators' to be found in children's drawings (Koppitz & Munsterberg E. 1968). The third type has been concerned with how normal children depict personally important or emotionally significant topics, rather than with personality assessment or clinical diagnosis. Children's drawings are analyzed to explore their view of major problems in the world today. When children draw, they carefully choose their materials, crayons, colors, and patterns, plus the size and position of what they want to draw. Children's drawings are unique and can give us precise information about the young artist. Their views can be interpreted through drawings, as it is a better medium to interpret their interpretation of the future.

B. The Environment around and its Influences on Drawing

The cultural environment plays a vital role in the understanding of children, as studies suggest that the cultural envelope around children and the environment influences the drawings of the Children. Children's drawings, according to the development of their various skills, can be said to develop comprehensively on the two fronts of the inherent/universal factors that grow according to an intrinsic development program, and of factors due to the lifestyle environment in which they live and the education culture environment. One may say, that drawings are a reflection of Children's intellect development as well. It should be noted drawings here not only bring clarity but rather the concept of these drawings defines the intellectual level of the individual (Farokhi &Hashemi, 2011, Agarwal et. al. 2022).

C. Drawing as a Communicative Tool

Children are good with symbolic communication, rather than linguistic expressions. This symbolic representation is best reflected through drawings. Children draw as an "expression tool" as well. They draw as "what they know", it is about their emotional development, perception development, and Psychological development.

As per the examination results presented in 1908 of the 9,746 drawings that were collected in Switzerland, it is said that among the children who drew good drawings, they were found intellectually superior children. In the early 1900s, many research methods were developed, such as the reproducing method that attempted to measure the development level of the drawer through reproduction, and the completion test that completed a picture by drawing in the missing parts (Kitahara & Matsuishi, 2001).

D. Development of Drawing skills in Children

Drawing skills are equally important for expression, which depends on multiple factors like skill and development of fingers. Children draw what they know about, it's an expression of what they want to communicate to others. These are expressed with what exactly they see, and how they see, and are a reflection of their expression as well. Children need to have a lot of interest in familiar matters and events to develop an understanding of something to bring their emotions on paper. The color they also fill has a lot of inherent meaning. Its association with multiple emotions like interest, understanding, and sensitivity towards matter such as joy, anger, and contentment, and to level of development of emotions also enriches the drawing's experience.

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Drawings are improved with the fulfillment of life experience. Kitahar &Matsuishi (2001) believe that children's drawings according to the development of their various skills, can be said to develop comprehensively on the two fronts of the inherent/universal factors that grow according to an intrinsic development program, and of factors due to the lifestyle environment in which they live and the education culture environment.

E. Why do Children Prefer to Draw?

According to the studies, drawing is the tool children use to communicate with the outside world. Children, who draw, are happier as compared to children whose drawing skills are less developed1.

F. Choice of Paper and Colures

According to the studies available Choice of tools by Children is not by choice. The choice of pencil and paper is also dependent on children's mood and personality. Psychologists say that fat points are favorites with determined children, while children who have more difficulty expressing or asserting themselves prefer pencils with a fine point. The size of the sheet of paper chosen is a good indication of the place a child wants to occupy in general life. The bigger the sheet is, the more the child wants to show themselves off, while choosing a smaller sheet of paper shows that a child has good concentration. Farokhi &Hashemi,2011

Based on the analysis of previous studies done by different psychologists, various conclusions were drawn which suggested that:

The pen Faint lines indicate: Low levels of physical and mental energy, shame and depression associated with severe, pressure, and ranges demonstrate flexibility and compatibility, the analysis of children's drawings should be done by specialists; nevertheless some signs may suggest a problem: If you get recurring feelings of unease from the drawings If certain parts of figures are always missing, If eyes squint or are hollow, If crossing out is abnormal, If there is excessive darkening, If the drawings are tiny or, confined to a small space, If a child always refuses to draw or to describe drawings, If the same drawings are repeated within a month, If figures are empty, If shapes are not closed. This expert can analyze the problems or matters, which children wish to express (Farokhi &Hashemi,2011 & Frisch L, et. al., 2012). Children's Drawings and their Environmental Perceptions4 Children's drawings analysis has always been a systematic measure to evaluate children's perceptions and attitudes toward their environment. Various studies show that children's drawings have indicators for various problems, and they also reflect on solutions. As mentioned in a few research papers various scholars have worked on Children's drawings to decipher children's psychology, like as mentioned by (Brown et al.,1987) used children's drawings (children aged between 11 and 15), to reveal their changing perceptions of nuclear power stations. (Matthews, 1985) used children's drawings (children aged between 6 and 11), to represent their journey to school and home area using the free-recall mapping technique. (King & Piper,1995) used drawings from children between the ages of 5 and 15, to discover the variety and kinds of concerns children might have about the environmental crisis. She asked children to draw a picture of what it means to them when someone says, 'You have to save the planet'. She found that 87% of the children were very much aware of the environmental crisis. Nearly half (47%) depicted themselves or others taking personal action for positive social/environmental change. A similar methodology has been used to understand and analyze children's drawings to decipher the kind of environment Children would like to have around them. This would be helpful for planners to understand the kind of environment children would like to have around them and what kind of environment they are comfortable in.

The study was undertaken to understand the kind of environment, the children would prefer to have in their neighborhood.



Figure 1: Children's Drawings about their aspirations about their neighborhood.



Figure 2: Children's drawings showing a colorful environment with large open spaces for play.

IV. ANALYSIS AND RESULT

The physicalenvironment that children wanted to depict, was analyzed through content analysis of each drawing. It is found that children prefer an environment which is self-sufficient with all facilities like school, shops and proper transport facilities.

1) 96 percent of the children depicted trees, grass, bushes, and flowers in the drawings, which depicts that the children love nature and prefer to connect with nature and its associated elements like water, stone, sand, soil etc.

2) 89 percent of the children drew parks & open spaces, 77 percent drew amenities & facilities, 70 percent used vibrant colors and aesthetical elements, and 45 percent used diversified topography. This clearly shows that children give weightage to parks & playgrounds in their neighborhood.

3) 72 percent of Children showed various types of play spaces in their drawings. Their views conveyed that they need play spaces and equipment according to their age. 85 percent of children complained that presently many parks have only a few play equipment that belong to all children even though they are of various age groups. So there are always regular clashes between the children of varied age groups in the neighborhood park.

4) Children also depicted various types of amenities and facilities like homes, 76 percent; shops, 65 percent; roads, 82 percent; parks, 95 percent; and schools, 64 percent, etc. in their neighborhood. Their views depicted that they don't want to travel many distances for their routine spaces like schools, marketplaces, and play spaces. Even they prefer such spaces within walking distance or can be accessed by bicycle paths.

5) 45 percent of children depicted verified topography like mounds, ditches, colorful walkways, and slops in their drawings. This shows that children do not prefer dynamic walkways and surfaces in their neighborhood.

6) 70 percent of children also showed colorful environments with aesthetical elements like sculptures, murals, and wall paintings. This depicts that the requirement of an aesthetically pleasing environment is the need of the children.

7) The drawings of 87 percent of the children highlighted vibrant spaces full of activities in their neighborhoods. These activities belong to daily routines like walking, playing, cycling, shopping, planting, gossiping, etc

8) 55 percent of Children showed current environmental awareness in their drawings like cleanliness, brotherhood, save water tree plantation etc.. This means that children wish to live in a neighborhood that is clean, free from crime, riots, and even no littering around.

9) The surrounding macro climate depicted more plantations and a greener environment, where there are greener breathing spaces. it means that children admire neighborhoods with greener environments and open spaces with ample running areas. Children also admire an open greener environment, which is also better for their overall development.

10) The drawings of 68 percent of children talk about the social environment in their neighborhood. They prefer social gatherings for their enjoyment& fun. They are very keen to organize Television serial-like social activities regularly for interaction with friends and elderly people in their neighborhoods. Therefore Children like to experience a neighborhood that has a balance in the social environment, where all individuals are treated equally, without discrimination.

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Figure 3: Children's drawings showing current neighborhood issues.



Figure 4: Children's drawings showing current neighborhood issues.



Figure 4: Children's drawings showing the environmental awareness of the children.

V. DISCUSSION

Generally, adults see children as shy and treat them lightly, but drawings depict that they underestimate them. The findings inferred that children are very intelligent and give much weight to their surrounding environment. They observe their environment very minutely and they know much more about their environment than adults. They wish for various amenities & facilities, a colorful environmentwith aesthetical elements, open spaces for play, and interactive spaces for social connection on one side, and on the other side they also want their neighborhood should have greenery, brotherhood, and cleanliness. This means that they are very aware of current environmental and social issues. Their active zones are home, school, parks & open spaces, and commercial spaces and they want these spaces should have a lot of green and natural elements.

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They also wish to see a colorful environment all around in their neighborhood, while visiting these spaces. It is often felt that children do not like to meet & enjoy with other children and adults, while their drawings clarify that if there are qualitative social interactive spaces as per the aspiration of the children, they not only want to interact with other children but also they wish to interact and mingle with adults. In this way this research defines that any space related to the children should be designed as per their views and drawing can be an appropriate method for getting the views of the children.

VI. CONCLUSION

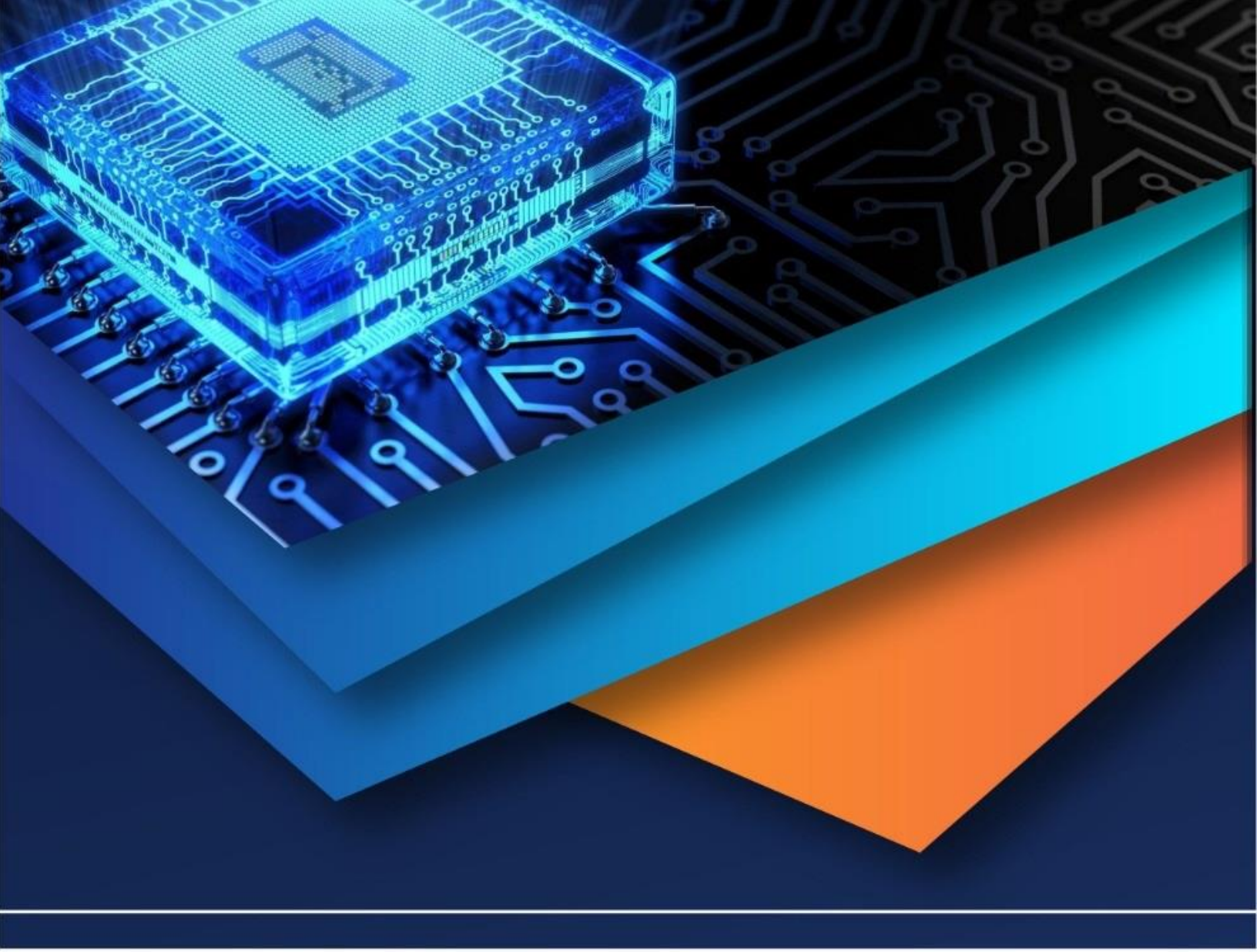
The depiction in drawings of children insists demand for a qualitative environment in a neighborhood like natural elements and green spaces. Several children associate the notion of the neighborhood not with the landscapes but with the activities and people who live it up daily. The depiction is also based on the activity pattern that children want to have around them. They like to live in a world that has harmony and balanced infrastructure, with ample breathing areas along a cleaner environment.

The environment plays a vital role in a child's physical social, emotional, and cognitive aspects. Children use their drawings as an expression tool to express the environment they want around and are willing to grow in that environment.

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