Gender Differences in Learners' Perceptions of an Ideal Primary School

Mahbubeh Khaluee, Fatemeh Khozaei

Department of Architecture, Kerman Branch, Islamic Azad University, Kerman, Iran

Abstract—Scholars have reached a consensus that students' perceptions of learning environments have an important effect on their learning. The influence of physical attributes of educational space on students' satisfaction has been studied extensively. However, our knowledge about students' preferences for an ideal school is very limited. The current study is an attempt to address this gap. The sample in the current study consisted of 118students aged 8 -10 years old in the study. Participants were recruited from two public primary schools in Kerman, Iran. The data gathered through semi-structured interviews, and drawings. Quantitative data was analyzed using chi square tests. The findings from the quantitative data were further explored by qualitative data gathered from 14 (seven girls and seven boys) volunteer students.

The study found a significant difference between boy's and girl's drawings. Boys portrayed more aerial views and the exterior of the school while girls depicted the frontal views and the interior of their ideal school. In addition, boys incorporated more natural elements, playground equipment and outdoor sport fields in their drawings. In contrast, girls were more likely than boys to use more decorative accessories in their drawings than boys. The result of this study suggests that children's perceptions about ideal school are gender sensitive. The implications of the study for educational policy makers have been outlined.

Keywords—Learning, Material Criterion, Primary School, Boy and Girl Student, Ideal School.

I. INTRODUCTION

Substantial research has highlighted the concern that students don't enjoy learning and school environment (see Picard & Boulhais, 2011).Despite the major role that physical aspects of educational environments play in learning and satisfaction(Barrett et al., 2015; Huang, & Waxman, 2009), a careful perusal of literature search reveals that not much exists on children's perceptions about their ideal school environment.Even fewer studies have examined gender difference in children's perceptions. To address this gap, this study presents the voices of children on the idea school.The findings of this study caninformeducational policy makers about the creative waysto improvethe school environment thereby enriching the school experiences of children.

II. LITERATURE REVIEW

Picard and Boulhais (2011) comparedthe differences between girls' and boys' expressive drawings. Two hundreds and ten boys aged 9 to 15 years oldparticipated in the study and the results showed thatcompared with the boys, the girls gained a higherscore onthe expressive drawings. In a study by Turgeon (2008)examining the different characteristics of children's free drawings, boys were likely to use a larger portion of cold colours than warm ones. "Girls' drawings were more likely to contain flowers, animals, and sky and boys' drawings were more likely to contain people" (Turgeon 2008, p. 527). In another study, Kangas (2011) invited 10 to 12 Finnish children to write a story abouttheir ideal school and learning environment where they feel happy to study. The results indicated that children desire anentertaining school, where all activities are amusing and undemanding and do not need to invest energy (Kangas 2011).Another study conducted by Uzunboylu and OÄŸuz, (2010) found that children's drawings are influenced by environmental factors.The main drawback of these studies is that they are cross sectional and rarely have contextualized the data. In addition, the selected samples of the available studies are western children. Results from western samples may not be generalizable to eastern children. Apart from lack of generalizability,empirical research on Iranian children is scanty.

III. THEORETICAL FRAMEWORK

According to sociocultural theory, learning is associated with the context in which occurs and is challenged by the culturally based shared experience (Vygotksy, 1978). Learners (here perceiver) are not passive recipient of information and their perceptions are not static;the personal trajectory of the perceiver interacts with his or her thought and cultural context (see Allahyar, & Nazari, 2012).Every culture socializes boys and girls in different ways.Gender role socialisation theory argues that boys and girls are raised to comply with their prescribed male

or female gender role. Children come to know about theirrole through interactions with parents and others and in the society (Marini 1990). Adopting the roles will be reinforced through observation (Polavieja &Platt 2010).

In the light of above mentioned theory, we will explore children's perceptions in Iranian context and compare them.

RESEARCH METHODOLOGY

The students' perceptions about an ideal school were investigated using a mixed methods approach.The data was gathered through aquantitative survey, semi-structured interviews. To this purpose, 118 (59 boys and 59girls) 8 to 10-yearold students from 2 public schools in Kerman, Iranparticipated in the study . Table… shows the demographic information of the students. In order to explore the quantitative data from drawings,14 volunteer children purposively selected toshare their views about the ideal school throughdifferent verbal and nonverbal modes. Gathering the data from the children from different ages could enhance the richness of the data.

Count

		age			Total
		8years	9years	10years	
gender	male	11	31	17	59
	female	11	31	17	59
Total		22	62	34	118

Data collection included three phases.We obtained the consent from the board of schools for conducting the research.Following the permission from the board the research, we sent the participation consent formsto parents and participantsand informed them about the purpose of the study and the details of participation. We also ensured both parents and participantsthat there would be no risks to the child participating in this research.

In the second phase of the study, each child was given an hour to draw his or herideal school on an A4 size paper. In phase three,at the suggestion of Einnarsodottir (2005), we used drawing and storytelling techiques. During the drawing, each child was interviewed individually for thirty minutes. The first author employed storytelling techniques to encourage the children talk about their ideal school and reflect on their drawings. Gathering the data through different methods helpedthe researchers to gain a comprehensive understanding of the data.For instance, children who were not able to communicate their idea through drawing could express them through interviews.

IV.   DATA ANALYSIS

Data collected throughinterviews were stored, transcribed, translated, coded and analysed inductively (Bogdan & Biklen, 1998). Similarly, children's drawings were analysed for repeated pictures, elements and words with the specific focus on the absence or presence of either dichotomous categories a) frontal vs.aerial views of drawing, b) interior vs. exterior, c)conventional vs. unconventional design. These categories were also analyzed quantitatively and qualitatively.All the qualitative data were coded by the first author and another trained coders. The reliability between the researcher and the coders was 0.85. This number shows almost a perfect agreement between the coders (Landis & Koch, 1977).The second author was an auditor monitored the data analysis.

V.   RESULTS AND DISCUSSION

5.1Physiological and physical aspect of an ideal school

During the interview all participants emphasized that ideal school needs to inspire feelings of happiness, entertainment,fun.Findings of this study are consistent with the ideathat boys and girls desire an entertaining school, where all activities are fun (Kangas 2011, 218). Girls frequently used emotional language to explain how their ideal schools look like. For example,one student said that she wants a school in which everyone is smiling and happy. Emotion also was reflected in the names suggested by the girls for the ideal schools. Rainbow, flowers, angles, fairy, beautiful stars, princesses, and cute children were some of the names. The emotional aspect of an ideal school wasevident in the girls' drawingswhich contained wallsdecorated with flowers, stars and hearts. Interestingly, the girls' drawing contained more peoplecompared with the boys'ones . In justification of this,the girls highlighted the role of social relationships in human's life. For example one of the participants said: *in my dream school my friends are always with me, I feel bored to play alone.* This result was inconsistent with the findings from Turgeon (2008)'s study that indicated boys tended to include more human figures in their drawings than girls. With regards to the colours, consistent with Turgeon (2008)'s study the girls in the current study used pink, yellow, and blue for painting the school,its equipment and the figures' clothes , while boys used darker colours. In this study boys were less likely than girls to uses affective language. For example the names that boys suggested were mainly associated with science.Robotics, scientists, digital schools are some of the suggested names.Only one of the boys selected a religious affiliated namefor his ideal school. When we asked the participants the reason for such a selection, most of them unanimously agreed that the names reflect power.

Both boys and girls emphasized that physical structures of the school environment play a key role in happiness and stressed that schools need to be big, roomy and welcoming. Apart from differences in language that the boys and girls in this studyused to describe their ideal schools, the way they symbolised happinesswere different. The tendency for having natural space, animals was frequently reported by the boys. The natural space in the boys' perspectives was required for doing sports. Interestingly, for boys sportwas an inseparable element of entertainment.The boys expressed a strong desire for park,outdoor swimming pool, outdoor football field,outdoor grass field, outdoor ping- pong and volley-ball court. However, girls placed more importance on the availability of playground equipments for more leisure and funat school.In addition boysstated that their ideal schools need to be equipped with different cutting edge technologies such as the latest laptops robotics class.

5.2 Disparities and similarities between student real and ideal school

According to children within the ideal school, they can select among a range of activities to feel engaged. The girls' ideal schoolwere quite different from the real schools.For instance, one of the girlsportrayed herself as a princess in an ice castle or for another one's school building was like a rainbow. However, the arrangement of the seats in the classroom setting was similar to the real classes.

Interestingly for boys an ideal school was similar to their real urban school. This can be seen in Picture1which was drawn bya 9 year old boy in grade 2.

5.2.1 Aerialversus Frontal views

Separated Chi square tests on the dichotomous variable revealed a significant difference between the boys' and girls'drawing views. $\chi(1) = 3.189$, $p = .074$. Boyswere more likely to draw aerial viewscompared with girls.
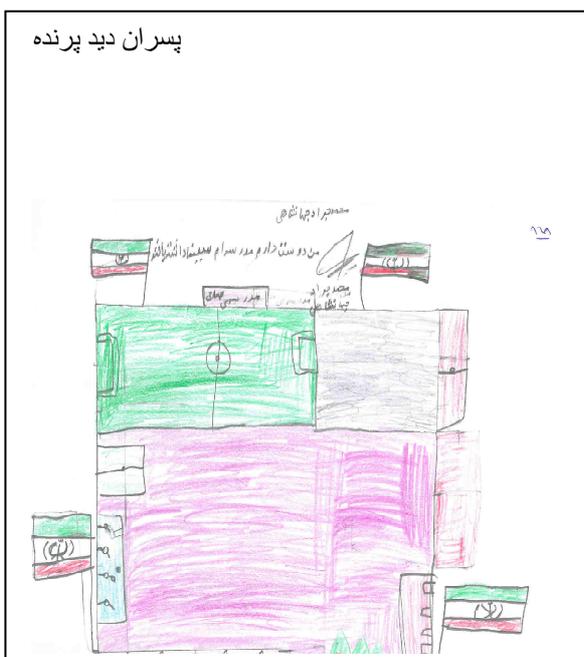

5.2.2 Interior versus Exterior view

Close examination of the drawings showed thatboyswere more likely to draw the exterior of their ideal school compared with the girls$\chi(2) = 4.983$, $p = .083$.

5.2.3 Unconventional versus conventional designs

Analysis of the drawings showed that in designing the school boys used more conventional forms of tables and chairsand windows. However, girls had more desire to draw unconventional forms of the windows (heart- shaped, cake shaped) and the roof (rainbow shaped).

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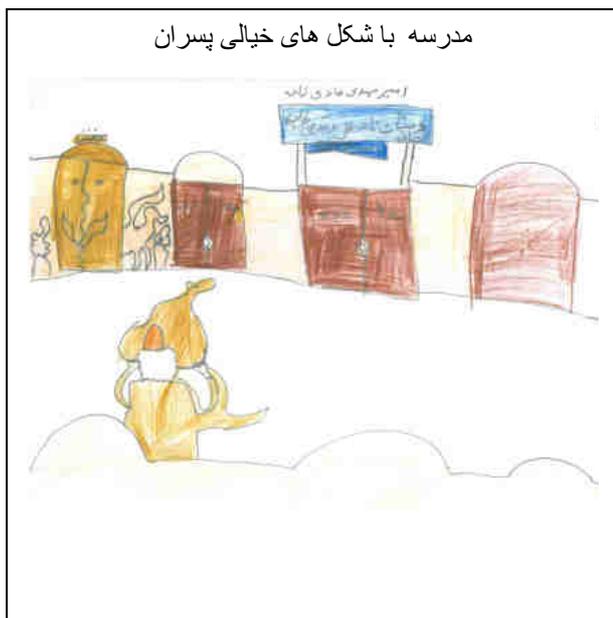
5.2.4 Absence or presence of natural elements

Interestingly , majority of the childrenincorporated natural elements in their drawings Further analysis showed that comparing with girls,boys were more likely to usenatural elements in their drawings $\chi(1) = 4.391$, p = .036.

5.2.5 Playground equipment and sport fields

Playground equipment(e.g. swing, slide, see saw) and sport space (e.g. outdoor football pitch)were frequently repeatedin both boys' and girls'drawings.Girls depicted more playground equipment in their drawing$\chi(1) = 9.538$, p = .002, while boys depicted more sportsfields .

5.2.6 Decorative accessories:

Girls were more attentive to decorative accessories such as heart, flower, star, balloons. Interestingly, boy' drawings were devoid of anyaccessories.Girlswere more likely to depictdecorated chairsin comparison to boys. $\chi(1) = 3.890$, p = .049

	Boys	Girls	Total
Frontal	36	45	81

view			
Arial view	23	14	37
Interior	4	6	10
Exterior	49	38	87
Both interior and exterior	6	14	20
Natural elements (tress etc)	47	36	83
Absence of natural elements (tress etc)	12	22	34
Playground equipment	34	17	51
Absence of playground equipment	25	41	66
Decorated chair	1	6	7
Absence of decorated chairs	58	52	110

VI.   DISCUSSION AND CONCLUSION

The purpose of this study was to compare primary school girls' and boys' perceptions ofan ideal school. The study found significant differences betweenthe perceptions of these two cohorts.This is consistent with social cultural and gender role socialisation theory. According to social culturaltheory the personal trajectory of the perceiver interacts with his or her thought and cultural-historic context (see Allahyar, & Nazari, 2012) and gender role socialisation theoryargues that every culturesocialisesboys and girls differently. Girls'drawing of their school includedstudents, tables, chairs, walls decorated with accessories such as heart, flower, star, balloons. Compared with girls, boys used fewer and darker colours and their drawings lacked any decorativeaccessories. An ideal school for girls wasan entertaining and happy place with bright colours, while the concept of happiness for the boys wassymbolized differently.Sport was an inseparable element of entertainment for boys. That might explain why boys expressed a strong desire for sport fields .Interestingly, theimage of an ideal school for boys wasn't very different from what they are studying.The findings of this study caninform educational policy makers about the creative ways to improve the school environment thereby enriching the school experiences of children.

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