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Children's Gender and Use of Space at Home

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Abstract. Previous studies show that the formation of children's gender roles are primarily affected by their family, the home environment, friends and their choice of toys. The most vital and primary factor with regards to gender is their domestic life within the home environment. This study discusses possible issues connected to gender-based play and toys, and relations with children's space use at home. Research shows that gender-neutral children's spaces may assist in providing children spaces that enhance freedom and creativity. Thus, this study was conducted with Turkish children between the age of 7-13 focusing on children's play and lives at home. The study analysed the relationship between space use and gender identity of children and examined on how it affected children's behaviour. In addition, the study concentrated on how parents affect their children's choices while the children selected and define a specific space like a room or corner in their homes. The study progressed with three instruments, which are; schematic plan/ diagram, photography, and one-to-one interviews with both children and parents. The whole process was recorded on video with the consent of the parents. According to the results, children were found to be more willing to play and spend their times in their living rooms. While girls were more interested to represent themselves in social spaces, boys were more reserved than girls. The children generally preferred to spend time close to family members. Therefore, if there is an intention of creating gender neutral spaces for children, parents should consider such issues such as, decreasing the gender-typed colours, and objects, providing flexibility regarding the transparency of the space increasing the interaction between parents and children, and giving children the option of being both inside of the space and also outside of the space. This study was completed with the aim of reducing gender differences of children's spaces and creating guidelines for interior designers and parents in this regard. This is believed to have significant value in designing independent spaces with interior design principles for children who wish to identify a space that is truly their own in the home environment.

1. Introduction

The case study aims to examine how much parents affect gender definition and how effective this is on use of space at home. There have been studies on child's spaces, however, there appears to be limited studies interested the gender identity and effects on children's space use and as consequence, its emerging causes as the design and space division within the home interior.

This study has been written with the aim of answering the following questions, which are; where in the home do children play, does gender affect where the children play in the home environment, and if there any differences between parents' and children's views on children's preferences.

1.1. Child at home

As beginning point for the case study, it is shown that families, especially mothers, both want their children to keep nearby but, do not want to change the characteristics of the common house parts. The most common space is living room, which is designed for an adult taste. For parents, playpens were the best solution to keep young children close to themselves and also avoid any external dangerous factors. However, parents do not prefer to go outside of the design aspect of their houses with playpens. Therefore, the children's self-questioning about use of of space has become unavoidable. They will start to search for a specific space to feel free in. [1]

On the other hand, children are losing their curiosity and creativity due to the poor design of the environment that they interact with -especially in the home space. How children's creativity can be supported depending on the changes of the house's design was questioned. Three main factors were listed parallel to children's creativity and getting curious towards to the space, which are; "Stimulation of natural elements, flexibility of functions, and play-participation". Depending on previous research, four principles were defined as part of the design order to increase children's curiosity and creativity as; "Connection between open and close spaces such as natural spaces, small spaces, moveable fittings, partition walls for children can define a special area for themselves, creating the diversity with the natural elements -that is approved natural elements directly affect creativity-, and playing with the natural objects". [2]

Existing research toy rooms showed that almost all children rarely played in their toy rooms, even if there were any toy rooms, the use of toy rooms were storage much more than a space for play. [3] The study opens up new discussion on with some questions such as; if the children do not play in their rooms or toy rooms then where do they play and which parts of the house are preferred by them to play in, and how the children feel about to not having any their own specific space.

1.2. Gender identity

Children's selection of toys, their friendship, and peer's behaviours towards them are influential in shaping their gender identity. As a result, children are affected mostly by their peers in social environment and this affection provides children to feel pressure on their choice of gender stereotype behaviours and actions. Another observation was based on children's choice of toys. [4]

Gender-typed toys can affect a child's gender identity. Research shows that, children's behaviour and their understanding about gender does affect parallelly due to the type of toys. It has been observed that in the social environment, with peer pressure, although children played with gender neutral toys, when it came to classification both boys and girls preferred toys according to their gender. [5] Thus, gender identity is affected by multiple agents, such as; parents and peers at home and in school. Findings showed that peer relations and activities play an exceedingly effective role at children's gender identity. On the other hand, the affection of parents plays a major part on children's gender identity as they decide the children's duties at home. As a child, the child is always willing to follow their parents, mostly girls follow their mothers and boys follow their fathers. As an example, throwing out the garbage and helping the father in mechanical work, repairing duties, cutting the grass were counted as "men's work" which are done in the garage, living room, garden, and exterior of the house. It can be estimated that boys are spending more time between those spaces and the child began to be more into that kind of works and spaces. Moreover, cooking, washing the dishes, cleaning, ironing the clothes were counted as "women's work" and these works are mostly done in the kitchen, bathroom, and cleaning room. Girls copied the mother's work and spend their times in related spaces. [6]

Consequently, it appears that there are different uses of space and space differentiation between boys and girls. Children get their first behavioural orientations of how they should behave according to

their roles of "female" or "male". If chore distribution at home is equal, children will be more willing to contribute to all work without considering them as men's or women's work. This is thought to minimize the gender discrepancy of space use inside of the house. [7]

2. Method

This study aims to clarify where in the home do children spend their times according to gender factor. Through interviews with the children and their parents to understand children's physical and social interactions due to space use in home, and how parents and children affect each other while using the chosen spaces, the expectation was to evaluate the chosen spaces according to gender factor, and analysing those spaces and finding common qualities both girls' and boys' chosen spaces. The goal is to overcome that diversities and minimizing it. The characteristics of the space with regards to the use of natural elements, children's safety, environmental complexity, and interior space flexibility [2] were used as measurement range of the house's quality in the study.

2.1. Setting
The participants were chosen from Izmir, Turkey. The characteristics of the houses were mostly single storey apartment flats, some participants' houses were single houses that were two storeys. All houses were close to school and children's playgrounds. All of the houses had good heating and air conditioning, and adapted to the weather conditions of Izmir, summer time is hot and dry, and the winter time is warm and rainy.

2.2. Participants
Participants were 10 children between the age of 7-13 and their parents. Five children were 7 years old, four children were 13 years old, and only one participant were 10 years old. The age range was chosen with the purpose of children's gender identity shaped by their parents, and by peers. Participants were formed as seven girls and three boys. Seven children have siblings out of ten participants; four children had sister and three children had brother. Both of the siblings were interviewed. The number of participants is limited due to the private and in-depth nature of the study.

2.3. Instruments
The study progressed with three instruments, which are; schematic plan/ diagram, photography, and one-on-one interviews. All of those processes were taken to video with the allowance of parents.

    In the schematic plan part, children were asked where they would like to spend time and play inside of the house, and how much time does the child spend his/her time in that space. The second part continued with photography, which worked parallel with schematic plans. The children were asked to take photographs of the spaces where they would like to spend time and play to measure the child's desired spaces' factors as lighting, fittings, natural elements, children's safety issues, environmental complexity, and interior space flexibility. In the last section, children and parents were interviewed separately. Three main topics of interview were; where in the home do children play, how are children affected by where they play within the home environment, and if is there a difference between parents' and children's views. The first topic was observed and interviewed as two sub-topics; individual and as group. In the second topic, observation of the children's gender identity and their desires were asked. The third part was for understanding parents' and children's views and analysing the different and the common views. In addition, in the fourth part, it was asked to rate the space's quality from parents, with the aim of parents' knowledge about the qualifications of the space.

3. Results and discussions

The interviews were realized in December, 2019. The first two participants were siblings. The first participant was a 7 year old girl. On weekdays after school, she was permitted rest and play until dinner time. After dinner, she did her homework with the help of her mother, and then was free until

sleeping time. On weekends, after courses, she played with her friends in her house. She specified that she likes to play in small areas such as under the dinner table. Her mother mentioned that as parents they do not want to limit their children because of the hard and tiring school times. The second participant was first participant's older brother and was 13 years old. As playing times, he stated that on weekdays after his school he likes to play computer games alone in his room. Sometimes he likes to play with sister in their living room. At weekends, he likes to spend his time outside with his friends. At home, he specified that sometimes he went to the garden to play with his sister and father, but most of the time he likes to play inside of his bedroom as it was more comfortable for him.

The third participant was a 7 year old girl. She was the only child of the household. She was not limited by her parents in terms of playing hours or playing spaces. The most striking part of the interview was that she thought that her toys were alive and she likes to talk them a lot. The fourth participant was also 7 year old girl. She had an older sister who goes to university out of city. After school time, her mother gave her permission between 16.30-18.30 to relax. She mentioned that she likes to create new spaces under the dinner table and closets. The fifth participant was a 7 year old boy. He did not have any siblings, after school time he likes to play outside with his friends if the weather was good. He has not any own room, he stays with grandmother in a room. He told that playing in the living room was more comfortable than playing his and grandmother's room.

The sixth and seventh participants were siblings. The sixth participant was a 13 year old girl. She mostly spent her time with her technological devices and while playing with her devices, she liked to be in their living room. The seventh participant was the sixth participant's younger brother. His most interesting answers included that he did not like to have any girl friends and he does not like to play with his boy friends inside of the house. Most of the time, he spent time outside with friends. When he is alone, he stays and plays in living room. The eighth participant – a 13 year old girl- specified that she and her younger sister can only play in their rooms. Their mother prevented them from playing in other spaces, especially living room. Her mother stated that she created large rooms for her daughters and they should only play in those specified spaces. "If they would not, what purpose is there in owning a room", she said.

The ninth participant was a 10 year old girl. She did not have any siblings. The participant was an extremely social person. Her mother did not limit her in using the various spaces at home, however if she locked the bathroom, her mother got angry. The last participant was a girl who was 13 years old. She had a younger brother who she did enjoy spending with.

Interview results show that, 2 out of 10 children play and spend time only in the living room, 3 of 10 children play only in their rooms, 5 of 10 children spend their time in both the living room and their own room. Both girls and boys preferred to spend time in living room to their own rooms. However, the preference rates for the living room were 71% for girls and 66% for boys, and this clearly shows that girls are more likely to be in social space than boys. Each children's preferred space carried similar furnishing and fitting specifications. The most interesting result was, children who have siblings or friends from the opposite gender were more inclined to play with opposite gendered toys in different spaces.

Table 1. Girls' and Boys' Preferred Play Spaces Individually

	Living Room	Child's Own Room
Girls	60%	40%
Boys	30%	70%

As group or family playing, 2 of 10 children preferred their own rooms, 5 of 10 children preferred the living room, and 3 of 10 children preferred both. The rate use rate of the living room is 71% for girls and 50% for boys. Boys were more oriented to spend their free time outside.

Table 2. Girls and Boys Preferred Play Spaces in Group-Play

	Living Room	Child's Own Room
Girls	40%	60%
Boys	20%	20%

All of the spatial qualities were almost the same as both living room and children's rooms. When it was asked about their desired play space, 5 girls answered as living room, one girl answered as her bedroom, and one girl was answered as kitchen. All of the boys answered the question as living room. The reasons of why the child preferred that space was asked, girls answered that physically the living space was brighter, warmer, and larger, and socially, that they aimed to being close to family members. Boys answered that, physically the existence of television, the heating conditions, and brighter space, and as socially, being close to the members of the family. All of the children's reasons for preferring the living room was physical, and spatial conditions of the living room were better than their rooms such as larger and more windows which supplied more natural light and fresh air to the space, and the rate of the heat was much more in living rooms. Some children had their own televisions in their rooms but all mentioned the television sets in the living rooms as a reason to be there. As social criteria, living rooms can be called as the family gathering space, and children were happier and more positive in terms of being closer to family members. They mostly did not like to be alone.

Table 3. Physical and Social Reasons of Why Children Chose the Living Room

Physical Reasons	**Social Reasons**
Presence of television 18,75%	Common space 12,50%
Heating qualities 18,75%	Being close to family members 75%
Natural light 25%	Dislike of own room 12,5%
Internet connection 6,25%	
Defined space for child 18,75%	
Size of space 12,50%	

In the parent part of the interview, parents were asked in which spaces they gave permissions to the child to play and in which spaces they forbade. Moreover, which time intervals did they permit the children to play. 7 children's parents gave permission to play in living room and child room, 2 of 10 children's parents did not limit their children's play space, and one child's parents only gave permission to their children to play in their room. In terms of space forbidding, 9 of 10 children's parents do not accept their children to play in kitchen and parents' room. One of 10 child's parents do not want to limit their children, and a common comment was that their children's homework and time intervals limited their children from being free.

In the schematic diagram part, it is shown that children's one-to-one interviews' results were parallel to schematic diagram results. In terms of physical details, children were more interested in the spaces, which that were close to windows, heating elements, and defined spaces such as under the table, and corners of the furniture. The children spent most of their active play time in the living

rooms. In the photography section, children were asked to take photographs of the spaces in which they spent their free time. The first participant took a photograph of her table in the living room and her room and dining table, specifying that she liked to play under the table.

Figure 1. First participant's dinner table

The fifth participant took the living room's photo which showed the television. He did not want to play in his room because of the absence of air conditioning and the small size of the space. However, in the living room, he specified that there was air conditioning and large windows, as well as a television that he could watch.

Figure 2. Fifth participant's living room

The ninth participant first took the photograph of the dining table, because she specified that she especially liked to do her work and spend her time on that table. Then she stated that the only thing she liked the most in her bedroom was the sofa in front of the window and heater.
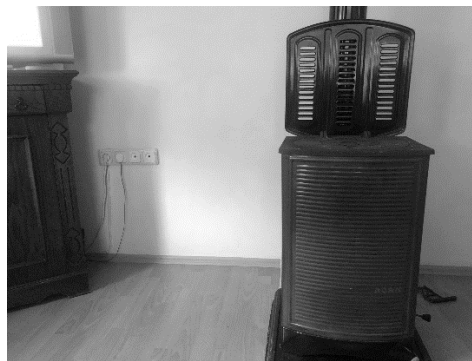

Figure 3. Ninth participant's dining table

Figure 4. Ninth participant's bedroom

The seventh participant took the photograph of the traditional heater and television. He specified that in wintertime, the living room was the warmest room in the house. In addition, while watching television, he liked to feel the warm weather inside of the living room.

Figure 5. Seventh participant's living room

3.1. Discussion

Children in the early ages start to recognize the living room as a play area with their playpens and mothers' need of keeping the child close, in eyesight. The child starts to identify the living room at first and wants to spend time in living room and as environmental space qualities of the living room was more suitable to the child's desired space. [1]

The child's school and domestic life affects the child's gender identity as related behavior is shaped in her or his development. [4] The child's peers, parents also shape the child's behaviour in terms of gender differences. These influences are expected to also affect children's domestic space use. In our society, there is a certain line of the works, which are more identified as women's or men's work. This naturally, affects child's gender behaviour and space use. In a standard family, girls are usually more curious about the mother and her works, and boys are more interested in their fathers' duties and behaviour. [6] In addition, housework is often transmitted to the child from the parents. Even though there is equality between men and women, there appears to be a distinction between the work. The child being subjected to the application of housework also affect the child's space use, and the time spent in those spaces. [7]

In the first section, child and the space, the literature was aimed at a discussion on defining the spaces that belong to the child, and where the child belongs to domestic life. In the second part, gender identity research was examined how gender influenced the child's behaviour according to social environment and domestic environment. However, in this study, the aim was to clarify how gender

and gender identity affected the child's preference regarding play space. It appears that children spend much of their time in the common living room. With the methodological instruments of interviews, schematic diagrams, and photographs, the children's space preferences have been investigated and how those preferences changed according to gender factor was observed. According to the results, it was found that children were more willing to play and spend their time in their living rooms, that while girls were more interested to be present in social spaces, boys were more reserved than girls. Most children mentioned the significance of being close to family members. Children were found to be more interested in gender-neutral toys and activities while playing in groups. [5]

4. Conclusion

While creating a space for children in the living room or any other play area, there should be a consideration of reducing the level of gender factor and creating common space for children. If the parents do not want to their children play in living room because of the furnishing and dangerous objects, they should consider a small safe space for children, which the children will also define for themselves. Conversely, if the parents want their children to play in their child rooms, they should consider small spaces with partitions or various space-defining elements that the children can use to create a scenario and use that space effectively.

With the intention of creating neutral spaces for children, parents should consider decreasing the gender identity reflected in spaces in terms of colors and objects, the transparency of the space, and both increasing the interaction between parents and children. This study aimed to reduce gender typed spaces and to create awareness in terms of children's preferences in domestic space use affected by gender roles, in order to design play spaces within children's homes where they can feel free.

References
[1]   Cieraad, I., 2013. "The Family Living Room: A Child's Playpen?" *Home Cultures*, 10:3, pp. 287-314
[2]   Faizi, M., Azari, A. K., and Maleki, S. N., 2011. "Design Principles of Residential Spaces to Promote Children's Creativity" *Procedia - Social and Behavioral Sciences,* Vol.35, pp.468-474
[3]   Stevenson, O., and A. Prout. 2013. "Space for Play" *Home Cultures*, 10:2, pp. 135-157
[4]   Braun, S., and A. Davidson. 2016. "Gender (Non)conformity in Middle Childhood, A Mixed Methods Approach to Understanding Gender-Typed Behavior, Friendship, and Peer Preference" *Sex Roles*, Vol.77, pp.16-29
[5]   Cherney, I., and J. Dempsey. 2010. "Young Children's Classification, Stereotyping and Play Behavior for Gender Neutral and Ambiguous Toys" *Educational Psychology*, Vol.30, No.6, pp.651-669
[6]   Ethaugh, C., and M. B. Liss. 1992. " Home, School, and Playroom: Training Grounds for Adult Gender Roles " *Sex Roles*, Vol.26, pp.129-147
[7]   Evertson, M., 2006. " The reproduction of gender: housework and attitudes towards gender equality in the home among Swedish boys and girls " *The British Journal of Sociology,* Vol.57, pp.415-436