
TOPIC: ENHANCING PRIVACY THROUGH THE SPATIAL DESIGN FOR TEENAGE GIRLS IN ORPHANAGE INSTITUTIONS IN MASHHAD, IRAN AS THE ISLAMIC COUNTRY

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ABSTRAK

A few previous studies are examined to understand teenage girls' needs and to improve orphanage design. However, there are not any specific rules for living space for orphanage teenage girls' (ages 12 - 18) where their privacy preferences are considered. In fact, the majority constructed buildings in Mashhad, Iran has not been designed basically for the purpose of orphanage which results in unsuccessful institutional care for children. Accordingly, lack of privacy as one of the most important factor for teenage girls, arising from the overcrowding at institutions in Mashhad. In fact, the guidelines for orphanage construction, which proposed by main organization in Iran (Behzisti) are not described precisely. The size and the other specifications of orphanages in regard to spatial privacy are not included in these guidelines. Therefore, there is no official accepted standard for spatial privacy for orphanage construction. Mixed quantitative and qualitative approaches will be conducted to enhance spatial privacy for 67 teenage girls who live in five selected orphanages in Mashhad. This study seeks to identify the most important orphanage teenage girls' spatial privacy preferences within the orphanages and neighbourhood in Iran. As some similarities among Islamic countries the result might be generalized in these countries.

Keywords: *Orphanage, Spatial privacy, Teenage girl*

INTRODUCTION

This research examines the amount of spatial privacy for orphanage teenage girl within orphanages and neighbourhood in Iran. Iran is encountered with the rise in numbers of unaccompanied children. This is because of various reasons such as poverty, corruption and increasing addiction, etc. As result, orphanage children need more attention and suitable place for living in comparing with the other children in the normal families. The most important factor for living teenage girls is existence of optimum level of privacy in their places. Therefore, it is vital to understand the varying desires of orphanage teenage girls in order to make them compatible and private orphanage in neighbourhood with their needs and abilities. The point of departure of this study is to investigate and recommend strategies to improve the spatial privacy for teenage girls in Iran and also Islamic countries.

BACKGROUND PROBLEM AND LITERATURE

According to the main organization in Iran (Behzisti) rules for caring orphaned children and economical aspects, considering minimum space that the teenage girls can have optimum privacy will be recommended. In Iran, two kinds of organizations are supporting unaccompanied children (government and non-government). Unfortunately the majority constructed orphanages (supported by government or none government) are not designed for the purpose of orphanage. Furthermore, too numbers of children are living in one place without noticing their needs.

Here we introduce optimum level of spatial privacy for living teenage girls in designing orphanages. Mashhad is the capital, the largest city, and center of commerce and industry in Khorasan province. Mashhad, Iran's holiest city is located between two mountain ranges of Binalood and Hezarmasjed, 850 kilometres North East of Tehran (Capital city of Iran). Mashhad population is 2,500,000.

In this research, we adopt three theories. In terms of human needs, we adopt the hierarchy of need by Maslow (1948a & b) and in term of privacy, we adopt the privacy regulation theory was developed by Altman (1975, 1977) and Privacy and Freedom Theory by Westin (1970).

The theory of hierarchy of needs by Maslow (1948a & b) mention that human have 5 kinds of needs such as: 1) the physiological needs 2) The safety and security needs 3) The love and belonging needs 4) The esteem needs 5) Self- actualization needs.

The privacy regulation theory by Altman (1975, 1977) explains the five properties such as: 1) this theory states that privacy is a temporal dynamic process of interpersonal boundary 2) Desired and actual levels of privacy 3) Non- monotonic function of privacy 4) Bi- directional nature of privacy 5) two level of privacy: privacy can analyse at two different levels. One refers to an individual's privacy; the other is a group's privacy. Furthermore, Westin (1970) identified four psychological functions of privacy: i) The need for autonomy: the power to control and regulate one's life; ii) the need for emotional release: to be able to relax from social roles iii) the need for self-evaluation: to be able to experiment with various social roles; iv) The need to allow for limited and protected communication with other to be able to secure confidential communication with others.

The construct for privacy regulation as the most essential factor holds that social, behavioural, and environmental mechanisms operating are employed to regulate privacy within built environments. El-Agouri (2004) proposed that these three mechanisms are mediated by three cultural domains: Psychological processes, social legacy and adaptation to other groups. Behavioural mechanisms control privacy in the way of psychological procedures. Social systems regulate privacy throughout admitted practices and social rules culturally patterned after social legacy and through adaptation to other groups.

COMPARISON AMONG PRIVACY IN IRAN, ISLAMIC COUNTRIES AND WESTERN COUNTRIES

A number of ethnographers Altman and Gauvain (1981), Lawrence (1982) and Korosec-Serfaty (1984) have clarified that cultural predisposition related to binary oppositions in order the design and use of spaces in the built environment. They approved that the preparation of spaces for human activities essentials to follow to prescribed cultural conventions. This means that the organization of space in the built environment, mainly in residential sphere, need precise several binary oppositions. Goffman (1959) mentioned that these may consist of male and female, public and private, or front and back and maybe spatial, functional, social or psychological in nature. Leach (1976) noted that people use both spatial and temporal boundaries to highlight the differences between various categories of space. Bearing in mind the preceding observation, the concept of boundary becomes important for the planning and design of architectural space.

Memarian et.al (2011) mentioned that in Islamic wisdoms, privacy has been assumed a holy significance and concerned for privacy starts with followers themselves. Based on this, a Muslim male must avoid watching another females and a Muslim

female must keep from looking at strange men (any man who is not her father, brother, son or husband and so forth). This way, there is always a good level of privacy present, regardless of whether Muslim man or woman is at home, mosque, school or street. This is not just restricted to covering; it includes home and other spaces considered as being private, where people may possibly uncover themselves or show their beauties. Therefore, it can be concluded that the structure of home, as far as the Islamic culture is concerned, should cater for family and home privacy.

Bianca (2000) mentioned that the private house has been and continues to be the fundamental building block of the manmade environment. Especially in the Muslim world, private houses and clusters of houses are the determining component of the urban fabric, not only because of their sheer numerical dominance but also because of the particular attitude of Islam toward formal civic institutions. Eickelman (1998) found out the opposition between women-private-deprived and men-public-privileged offered an accurate description of gender relationship in Middle Eastern societies, too. However, Architecture in the Western world developed out of a scientific paradigm characterized by rational separation and classification: Absolute space is divided into functionally defined compounds, the rooms. Sciama (1993) mentioned that the concept of privacy in the Western sense is "the need for individuals, families or other social groups, to separate themselves from others at various times, or for certain well-defined activities".

The Iranian researchers, Memarian et.al (2011) indicated that circulation design is defined differently in altered cultures showing the social associations among populations. The analysis of households in seventy-three cultures in Kerman, Iran, indicated that "the degree of space division in homes depends on the social and political complexity of a given culture". Meanwhile, the Islamic culture, by its durable emphasis on human's characteristic requirements, has searched for creation a setting in which both physical and mental well-beings might be provided for. There is a proper communication pattern in Quranic teachings, prophet's life and other holy believers. Islamic teachings describe a Muslim's acceptable behaviour, so home communication system must reflect these patterns and facilitate meeting of the religious obligations. Memarian et.al (2011) also examined the influence that attitudes toward privacy and hospitality has had on the layout and use of traditional dwellings in Persia (Iran). The dwellings take many different forms, from a simple tent to a multi-courtyard house. As home is one of those places where human's privacy is mostly realized, rules of "Shariah" have taken care of this need by specifying the proceedings through which one should enter house. This might be realised in Kerman's (Iran) traditional houses. Since providing a private place is one of the main reasons for construction a house, it is essential to pay attention of these rules in building the current houses.

Besides, the Iranian researcher Raissi (1996) studied that God has put 'salam' meaning "hello" as a nice and beautiful salute among Muslims to utter it whenever they see each other. The truth behind it is the development of safety and health. Islam has emphasized on asking for "permission" before entering someone's home. This permission covers social relations among Muslims, entrance of others to neighbours' homes, and children's entrance into their parents' room.

One of the Iranian researcher, Parchami Iragi (1999) studied that if we consider three spatial elements like "tent" as an Arab house, the distance between the tent and the fence and the place where a visitor should stand and say hello (it is recommended) That the visitor should stand on the outer side of the fence if the three distances mentioned are designated as three limits, the tent becomes the first limit, the distance from the fence to the fence the second limit and the other side of the fence becomes the third limit.

Memarian et.al (2011) mentioned that certain kinds of building-forms and internal layouts became familiar and widespread. Some of these have close parallels in other Islamic countries, where there is a similar concern for privacy and hospitality. The term 'privacy pattern' in Iran is used to denote the kinds of arrangement developed to separate the private and the reception areas of the dwelling. By 'hospitality pattern' we shall mean the arrangement that is adopted to provide a special area for guests. As already noted, the guests' area may be in, or close to, the private zone of the house. However, in some cases the two may be quite separate and far from each other. The system of entering others' privacy according to holy Quran by Memarian et.al (2011) studies is as follow:

The system of entering others' houses	Announcing the cotrance and ultering a kind saying by which the home owner could be notified Saying hello to home members whose reply could be a sign of an initial agreement and safety The necessity of asking for permission and dependence of our arrival on their agreement
Architectural patterns for Islamic countries: Memarian et.al (2011)	Home entrance, division of spaces, variety of rooms, separation of children's' rooms after certain ages from the children below 7 years

RESEARCH DESIGN AND METHODOLOGY

The research population consisted of teenage girls in the orphanages of Mashhad. However, the population was restricted to girls from 12 to 18 years old. According to the official records, i.e., from the Behzisti organization in Mashhad, 856 orphans are being kept in 26 institutional care centres in Mashhad. 507 individuals out of 856 orphans are girls, 349 individuals are boys. 240 individuals out of the 507 girl orphans are older than 12 years. As limitation in this study, main organization in Iran (Behzisti) does not give permission to go to the other remaining institutions. Then; five orphanages are selected (67 orphaned teenage girls) for achieving this purpose by Behzisti organization. Three of the selected orphanages belong to governmental organizations. However, the two institutions selected from non-governmental institutions. Khaneye Freshtegan in Mashhad is introduced as the best example of non-governmental institutions and design for the purpose of taking care of children. It is also important to make a comparison between this sample and the other four selected samples in Mashhad to achieve the optimum level of privacy for orphans according to their satisfaction about the design of their places.

Initially, for obtaining children's satisfaction about their privacy and their preference items of privacy in the orphanages, data's' are attained using questionnaires. Close-ended and open-ended questions which include privacy issues in this study will be prepared for unaccompanied teenage girls and experts (for validation of teenage girls' replication) according to theories and research studies and architectural standards to evaluate the teenage girls' preferences. According to the privacy regulation theory by Altman (1975; 1977), privacy can be analysed at two different levels. One refers to an individual's privacy; the other is a group's privacy. Individual and group's privacy can be classified into three levels as follows:

i) *Unit level*: it means the privacy at the level of the room which unaccompanied teenage girls are living in. This part of the questionnaire is designed to achieve to understand whether the current design of individual rooms is proper for teenage girls or not, and if not, how it can be improved with emphasis on their privacy.

ii) *Building level*: it means the study of the orphans' privacy in public places in the child care institutions such as library and TV room. The second part of the questionnaire is therefore specified to understand the relationships among orphanage teenage girls and also their expectations about public places regarding their spatial privacy.

iii) *Neighbourhood level*: at this level, this research intends to evaluate how the location of the institutions and orphanages can influence the ease of identification of the orphanage in the city. The last part of the questionnaire has been designed to evaluate the privacy of orphans at the level of the urban zone in which they are living, and to understand how the teenage girls face with their neighbours.

Furthermore, to evaluate the current orphanage design a field observation will be performed. In this Non-participant observation, all places and activities will be recorded at 5 selected institutions; these observations will be used to evaluate current and actual orphanages condition.

STATISTICAL ANALYSIS, RESULT AND DISSCUSION

Statistical Analysis for Close- Ended And Open- Ended Questions

Kruskal-Wallis test was used to analyse the obtained data from questionnaires using proc NPAR1WAY of SAS 9.1. Descriptive statistics were calculated using proc FREQ of SAS 9.1. Report of each open-ended question is derived based on the key themes. Then, those reports are classified and reclassified in comparison with literature review (Kvale, 2007).

RESULT AND DISSCUSION

The study employed some independent variables to identify the most important privacy preferences for unaccompanied teenage girls based on the unaccompanied teenage girls' privacy expectations. On the one hand, Proshansky (1970) mentioned that desired privacy is a key vehicle to manage and controlling the space and territory and Rapoport (1972) studied that privacy is the ability to control interaction, avoid unwanted interaction and realize desired communication; on the other hand, Altman (1975 & 1977) described desired level of privacy as the amount required for serving one's needs and role requirements.

As Pastalan (1970a) stated that various forms of privacy are comprised of environmental factors; Crowd ness of the space and confinement. Also, some researcher such as Baum and Paulus (1987) found that uncontrollable group density obstructs with privacy regulation and is frequently unfavourable to both individual and group functioning. Furthermore, Altman (1977) theorized that the most essential privacy need is to optimize social contact and to keep away from crowding with the purpose of sustain self-identity. Besides, in this current study, it was found that the maximum roommate number in a 12m² study bedrooms should not exceed two teenage girls. The teenage girls preferred to live in a dormitory with a maximum of 10 people. These results obtained from close-ended questions. On one hand, Hsia (1968) examined that the students who live in the dormitories mostly prefer large windows. They prefer the dormitories that are equipped with libraries and study rooms. On the other hand, Sundstrom (1985) mentioned that the physical environment as the "layout and appearance of buildings, the arrangement and properties of rooms (spatial system), characteristics of equipment and furniture, and the associated ambient conditions (sound, light, temperature, air)". In This current study the ideal number of windows was

asked from the teenage girls. According to the results, most of them preferred to have a bedroom with lots of windows; Majority of them did not like to have separate libraries at their dormitory and they would rather have the study bedrooms. As result, this current study can help designers in all the world, especially in Islamic countries to follow these rules.

Alexander (1977) examined that children's private space is where they can be alone with their friends; Bedroom, common space for shared functions, sitting room. Festinger, et al (1950) stated that the size of a setting offers opportunities for people to put distance between themselves or limits their options. Moreover, Zeisl (1984) categorized these aspects of the physical environment as "field characteristics" and 'barriers.'" He emphasized that field characteristics alter the physical environment through shape, orientation, size, and environmental conditions. He mentioned that colour changes in ceiling height in a room (implicitly) signal that someone considers this space to be two separate places, perceptually. Furthermore, one of the researchers in Iran, Ghavami (1998) mentioned that use of proper colour and scale in the orphans' spaces is very important. Some of these have close parallels in other Islamic countries, where there is a similar concern for privacy and hospitality. For example; Memarian et.al (2011) mentioned that hospitality has its roots in the relation of friendship that exists among all members of The Islamic society. The term 'privacy pattern' in Iran is used to denote the kinds of arrangement developed to separate the private and the reception areas of the dwelling. Moreover, Memarian et.al (2011) found architectural patterns in Islamic countries for respect to people privacy as: Crating home entrance; division of space; separation of children's' room after certain age from children below 7 years. Besides, in this current study, the colour of bedroom and the number of children in each dormitory were obtained from the close-ended and open-ended questions. These results were evaluated based on the best sample from the five selected institutions (Khaneye Freshtegan Orphanage), as well as the international architectural standards and the rules of Behzisti organization in Iran. According to some similarities among Islamic countries in order to respect the privacy of women, these result would be generalized in orphanages in Islamic countries.

To find proper neighbourhood context of the orphanage institutions to enhance privacy for teenage girls in Mashhad, the results were obtained as follow:

According to Harden (2000) who mentioned that not only a private sphere of home is essential for children, but also a local environment. The local sphere involved their neighbourhoods and was recognized in terms of proximity to home and familiarity with surroundings and people. In addition, El- Agouri (2004) described that the transformed physical environment, or built setting, includes buildings, their interiors, and the surrounding outdoor neighbourhoods. Summerlin (2006) the open space is studied to provide privacy. Safe outdoor spaces are particularly important for children who live in small and crowded homes. Goffman (1959) studied that the organization of space in the built environment, particularly in residential sphere, must express many binary oppositions. These may include male and female, public and private, or front and back, and maybe spatial, functional, social or psychological in nature. Bianca (2000) studied that the private house has been and stays to be the essential building block of the manmade environment. Particularly in the Muslim world, private houses and groups of houses are the influential component of the urban fabric, not only because of their vertical numerical dominance but also because of the specific attitude of Islam toward formal civic institutions. Eickelman (1998) mentioned that the opposition between women-private-deprived and men-public- privileged offered an accurate description of gender relationship in Middle Eastern societies. Previous studies have typically examined privacy from perspective of children or family in environment. Besides, this present study thus departed from the approach taken by other studies and also the

spatial privacy preferences were asked in open- ended and close- ended questions from orphaned teenage girls. As some similarities among Islamic countries, In the future studies these result can be generalized in these countries.

The results of 67 individual teenage girls' privacy preferences at their dormitory and neighbourhoods are:

- i) A middle size study bedroom should measure 12m² suitable for two people according to the Iranian standards for rooms.
- ii) The bedrooms should be with multiple windows (according to the climate in Iran for choosing the size for windows).
- iii) The location of bedroom should be in close proximity to the living room
- iv) The television room should be separated from the main living room.
- v) Teenage girls preferred to live at institution which is located near the park.
- vi) Prevention of locating the site next to the high ways and also down town and crowded area
- vii) Teenage girls' preferences for locating their institution in the calm area and country side of the city.
- viii) Teenage girls preferred to live at institution which is located near their school.
- ix) Pink is a preferred colour for teenage girls' bedrooms
- x) The elder children should be separated from the younger ones (the teenage girls from the others)

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