

The Impact of the Use of Green Spaces in Designing Residential Complex Public Spaces to Increment Social Interactions

Mona Sadr*, FatemehZahra Taari, Mohsen Faizi and Seyed Bagher Hosseini

University of Science and Industry , Faculty of architecture and urbanisation

Corresponding author: Mona Sadr

ABSTRACT: Human is created a social creature compelled to interact with other people to meet his physical and spiritual needs. In the past, individual social interaction took place at residence or among public spaces existing in between all homes and locations. Yet, contemporary by the existence of vertical connection among residential complexes during the recent century lack of space to interact is truly sensed; non-observance of this lack which is a basic human need i.e. interaction with others in addition to unstable and non-native architecture can cause irreparable damages on individual or society. In this research, it is endeavoured to investigate the role of public places in residential complexes and to increment social interaction by library method and in view of existing documents and in conclusion present solutions of interoperability of residential public spaces and consider the fact that the existing general spaces in between residential complexes that can cause interactions between human with nature and environment to establish interactions among residents which is reckoned features of sustainable and native architecture. In this paper, it is attempted to study the impact of using green spaces in designing communal spaces for residential collection and social interaction increment.

Keywords: vertical connection, public spaces, residential complex, social interaction.

INTRODUCTION

The need to be loved and cared, the need to be protected, the need of security and the need of connection are all the basic needs of human being; Maslow has placed these in hierarchy of needs and has emphasized on the significance of individual self-actualization. It is obvious that on one side individual needs and on the other the community exist. Satisfaction of needs in relation with individual or society is feasible. (Wener & Kalmart, 2006) Besides, housing is a location where individual spend approx.7 percent of their life, an appropriate location for creation of social interaction. Consequently it can be stated that creation of spaces where residents can interact with each other in tranquility and security is highly significant. In the past, the Iranian native architecture also consisted of residential areas that in addition to children playground adults could also exchange socially which is the same as social interaction in syntax. But contemporary residential complexes due to inadequate land and also lack of spiritual need observations has faded the role of public space.

Low density and open space in conventional residential complexes were essential for provision of favourable green spaces, high comfort and air current. From residents views residing in complexes the existence of green spaces and appropriate privacy are highly significant for observations of residential environment quality standards (Azizi & Malek Mohammadnejad, 2008). Mankind is truly in need of creating relation with nature and environment. The recent studies indicate that spending time in open air and being in contact with others has positive spiritual and mental effects on individual. (Wener & Kalmart, 2006) Collective spaces of a senior housing complex can cause social interaction among residents in a way that spaces become quite suitable and efficient for face to face relationships, common experiences space, human body relation and also the holding of activities for residents in collection or as public. The presence of people in such locations and their active role in collective spaces origins from sense of location whereby through limitation of social relations a sense of belonging to a group within a specified

land is created and thereby begins to fortify and consequently increment face to face density relationships. (Sarmast & Tavakoli, 2011; Golmohammadi, 2003) The current activities and behaviour in public spaces surpass limited activities; these are highly targeted that necessitate private sector and are more distinctive. (Massoudi, 2001) Architecture must provide distinctive spaces for various activities and interconnect in such a way that the emotional content, action and human life shall be reinforced. (Hosseini & Norouzi Maleki, 2008) Public green spaces whether to provide individual environmental needs or recreation space or else be a bed of communication and social interaction is highly significant (Souzanchi, 2005) and have essential role in sense of community (Huang, 2006). No doubt these spaces belong to each and every resident in the complex and are therefore realized as a private area but since all residents can use this area it's reckoned as a state of collective or public property. On this basis this can further be distinguished as a semi-public space in which as unit of activity has essential role towards complex residents in terms of their transportation, interaction and any other related activities. In spite of the discussed, in this paper it is endeavoured to investigate the role of green spaces in residential complexes against social interaction.

2. Method of Research

In this research pro classification of high-rise complexes, Tehran Prince Park residence complex was selected. The complex is situated in Kurdistan Highway on the verge and between Molla Sadra and Vanak. Tower area of public open space is approx. 20000 m²; nearly 9 percent of whole tower foundation.

The survey is descriptive analytical performed over 61 residents in Tehran international tower. For statistical sampling 70 questionnaires were handed to the reception. The questionnaires were distributed randomly amongst residents passing lobby; volunteers were requested to participate in the survey to complete questionnaire with queries. Nearly 61 individuals (87%) revealed tendency. In actual fact subjects of this research were volunteers used as samples. To carry this, some of the volunteers were interviewed for practically 20-30 minutes based on the subject of query. To investigate the effect of distance from ground and earth surface the degree of residents acquaintance and their interaction with one another were studied. Green space density was considered as independent variable and the degree of residents acquaintance and their interaction were taken as dependent variable in order to obtain the relation of green space density and the rate of residents relation with each another. Sense of relation was performed in the form of closed questionnaire for accurate data analysis. In this research, initially two types of queries in the frame of questionnaire were prepared. Some of the queries were designed based on Likert spectrum whilst in the other residents opinion were investigated on their use of residential complex public spaces existing. Here, Likert scale technique was applied for factor comparison and prioritization. Individual responses were then divided into five groups of: - a) very good, b) good, c) average, d) weak and e) very weak and/or to a) very high b) high c) average d) low and e) very low.

At the end of survey and after collection of questionnaires the data of each question was classified and the findings were considered as field observations. In this study, the relationship between two existing variables were studied and by application of regression analysis of variance these were anticipated in view of independent variable changes.

3. Research Findings

From 61 subjects under study 32 individuals (52%) were women and 29 (48%) were men. The age ranges in the studied group were between 10 – 56 years; average age being 33 years. In the query about individual inclination towards public and collective spaces where the feasibility of meeting and dialogue with others is procured (or private environment like home) these results were obtained; the observations revealed that despite the fact that a remarkable percentage of people are incline towards private spaces more than half of the residents (55%) preferred public spaces like they preferred parks and green spaces of the complex to home. The issue truly indicated that the results of the research were in discrepancies with findings of similar research carried in other countries. (Young, 2008) In conformity with residents comments some of the reasons were in relation with natural tendency to meet and have conversation and create relations with others while other reasons lie on the fact that complex residents need to interact since they have lived in flats for too long and in solitude.

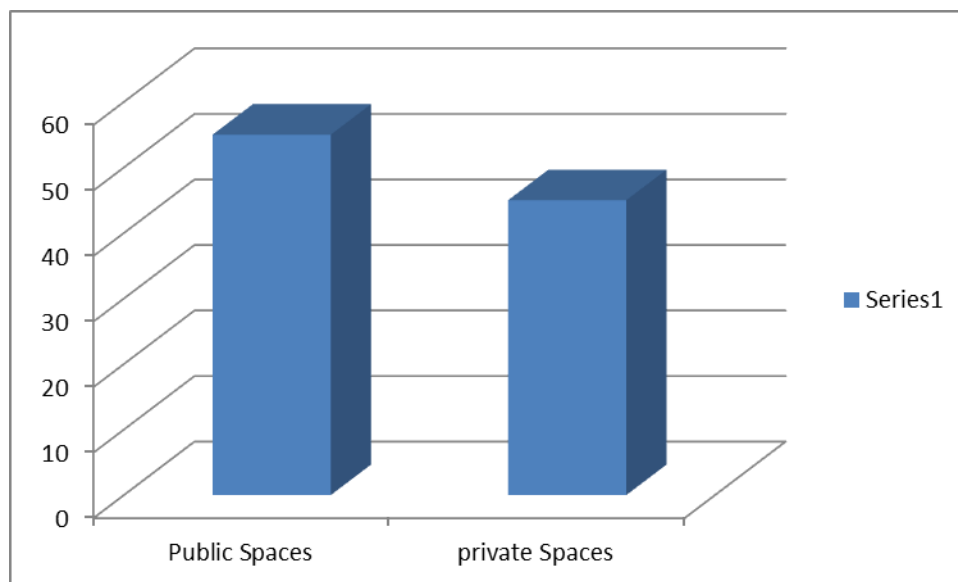


Figure 1. Residents tendency towards private or public spaces

The results of the survey indicate that each green space in the complex under study somehow have some impact on relation creation among complex residents. In view of the chart and on the basis of residents opinion, collective spaces such as parks, green spaces and also amphitheater or any other collective sector have significant role in interaction increment and acquaintance of residents with each other. Since the lobby of the complex is accommodated with furniture and TV set it has furnished an appropriate space for residents gathering such that from their perspectives it is reckoned second space effective on interaction increments of residents. Failure to define appropriate spaces for children's playground and also inadequate appropriate furniture for parents and for other complex residents around the space are the main causes of attaining third place ranking for the type of space and the rate of impact on interaction creation.

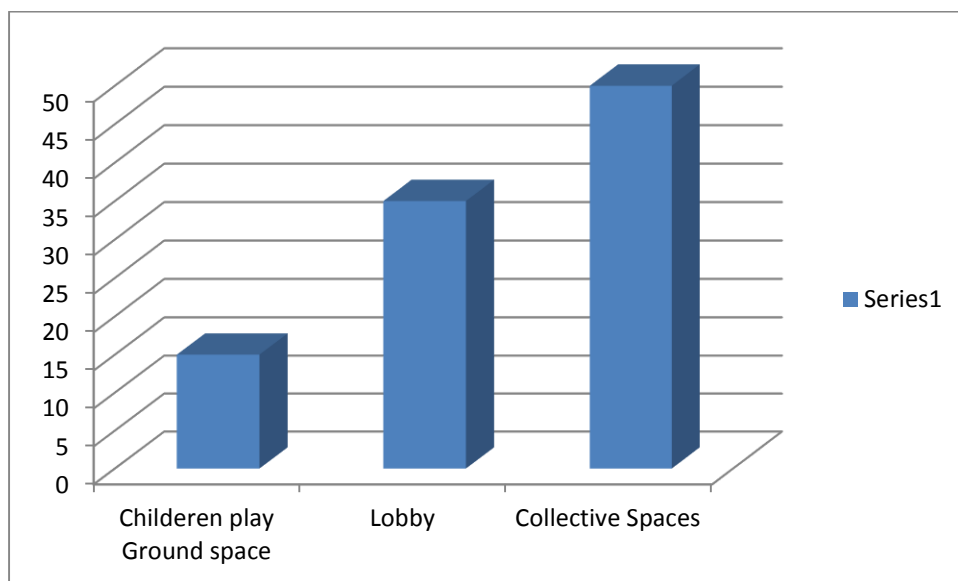


Figure 2. The role of spaces for residents acquaintance and interaction

As observed, less than half of the respondents (38%) do not use open spaces of the complex as much.

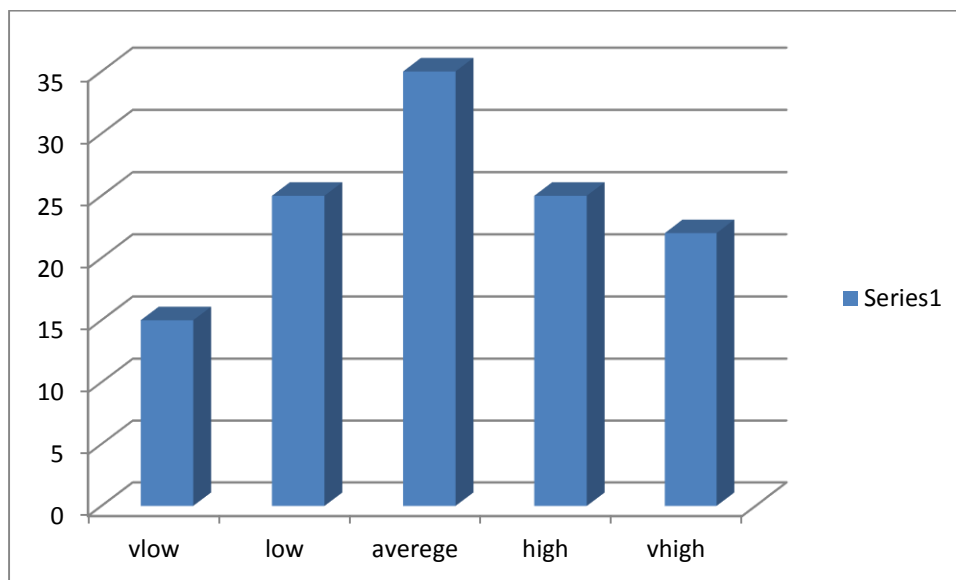


Figure 3. The rate of complex open spaces and courtyards use

4. General Conclusion

The combination of performance and activities for creation of unity of space and various arena of semi-private, semipublic and public are regarded as the main bed of interaction and social relations. Tehran Prince Park residence complex despite high-quality unit do not have such appropriate public spaces. Lack of trees and green spaces, lack of public spaces and collective level in comparison to the number of inhabitants and the foundation of the tower, lack of proper segregation of spaces like children's playground space from other public sectors all are factors that cause these spaces not to be noticed and welcomed the way they deserve to be by residents. The results of the research reveal that collective spaces have essential role in acquaintance and interaction increments of residents. Now that living in flats have distant human from natural environment, creation of open green spaces with nice architecture and beautiful landscape shall furnish bed of communication creation and social interaction. Further, by creation of general spaces in the heart of the building with consideration of some sections for residents gathering during afternoons can boost individual interactions and their relations with each other. Despite height that has distant residents from open spaces and from one another still the findings clearly show that on towers top floors height not only interaction will not decrease but just in the contrary will also increase interaction in pursue of residents acquaintance with one another. As mentioned prior gradual increase of height can reinforce the need for relation creation in open space and nature and with other residents in the complex. Consequently, individuals show more inclination towards using these type of spaces beneficial.

REFERENCES

- Archea J. 1977. The place of architectural factors in behavioral theories of privacy, *Journal of Social Issues* 33(3), 116–138.
- Burgess J, Harrison CM & Limb M. 1988. People, parks and the urban green: a study of popular meanings and values for open areas in the city, *Urban Studies* 25 (8), 455–473.
- Fleming R, Baum A & Singer JE. 1985. Social support and the physical environment, In: Cohen, S. & Syme, S. L. (Eds.), *Social Support and Health*. Orlando, Florida: Academic Press, 327–345.
- Huang SCL. 2006. A study of outdoor interactional spaces in high-rise housing, *Landscape and Urban Planning* 78 (3), 193-204.
- Wener R & Carmalt H. 2006. Environmental psychology and sustainability in high-rise structures, *Technology in Society* 28 (1-2), 157-167.
- Kotus J. 2006. A study of outdoor interactional space in high-rise housing. *Land scape and planing* 78:193-204.
- Woolley H. 2003. *Urban Open Spaces*. London: Spon Press.
- Yuen B. 2005. Romancing the highrise in Singapore, *Cities* 22 (1), 3-13.