



## Child Friendly Housing by Using Nature (Case Study: Tehran)

Zahra Ghasemi<sup>1</sup>, Mohamad Reza Bemanian<sup>2</sup>, Hamid reza Saremi<sup>3</sup>

Submitted:

2019-05-17

Accepted:

2020-05-09

### Abstract

Nowadays, in order to increase the quality of the place of residence, recognition of the characteristics of children as an important member of the community is necessary and considering the impact of nature on the child and the creation of the grounds for the game and, as a result of their growth, the importance of utilizing nature in housing. Do not by studying the works of traditional Iranian architecture in different parts of the country, the presence of nature in all levels of life is palpable, but this has become diminished in contemporary housing. Therefore, because of their sensitivity, children are more aware of the negative effects of this loss and make it for generations. Future ones also inherit. The present study seeks to provide a new definition and quality of housing by looking at the nature, the child and their link to housing. Because children spend long hours in housing, the purpose of this study is to evaluate the integration of housing and the nature and consequences of this relationship on children. The research method in this research is descriptive-analytical and correlation and the information is evaluated qualitatively. In order to achieve the goals, a questionnaire for assessing the types of children's games (physical, language, exploration, building, imagination and group), in housing that needs their growth, and completed by their parents, another questionnaire, based on different elements of nature, the design of a housing was defined and analyzed with a series of questions. In this questionnaire, a five-point Likert scale was used and using Spearman satisfaction correlation, the relationship between variables was determined and Cochran formula was used to determine the sample size. Also, the amount of play with digital devices, sensuality, security and joy of children was also studied. Four regions of Tehran were selected as samples. After examining the form, structure, function, space, decorations, colors and materials as elements that can be designed from nature and are present in the housing, were known. Findings show that there is a relationship between the elements mentioned and the children's play, and the role of space and materials in keeping with nature is important because of the creation of an environment and the desirable space for more types of games. Also, overall games that help children in open and semi-open spaces increase the security of housing. The higher the number of children's games, the greater the child's happiness and the sense of belonging to their place of life, and the game with the computer and virtual games is reduced. Form and structure are two elements that in the studied samples have the least average and effect of nature. According to the studies, it is concluded that the form and structure are less important in the use of housing, and because of the high buildup of housing, forms and repetitive structures are used. Special form and structure related to nature are more important in important urban buildings and are used for urban symbolism buildings because of the special characteristics of this form and structure. Therefore, the form and structure should be used according to the use of housing such as climates, topography, natural proportions and more.

**Keyword:** Nature, child play, child friendly housing, group play, Security

<sup>1</sup> Ph.D. Student of Architecture, Architectural Engineering Department, Borujerd Branch, Islamic Azad University, Borujerd, Iran

<sup>2</sup> Professor, Department of Architecture, Faculty of Arts and Architecture Tarbit Modares University, Tehran, Iran.

<sup>3</sup> Assistant Professor, Department of Urbanism, Faculty of Arts and Architecture Tarbit Modares University, Tehran, Iran