

Investigating the Role of Place Attachment in the Formation of a New Spatial Identity, based on Surveying the Adaptive Capacity of Citizens from Modern Urban Residential Views in Region One Area of Tehran

Abstract

The identity of people in society is formed in the light of various causes and factors. Location or environment is one of the most significant factors in categorizing individuals. The arrival and development of modern thought in Iranian cities has caused a change in the body and shape of the city in the past century. Moreover, this trend has accelerated, particularly in the last decade and after the Islamic Revolution, with the growth of technology. However, there is no comprehensive organization to change the mentality of individuals and their identity adaptation to the new body. It seems that the presence and use of citizens in these transformed environments has gradually led to a kind of spatial attachment in them. This research has been done by descriptive and analytical method and relying on quantitative and qualitative approach. To achieve the purpose of the research, after defining and explaining the concepts of spatial attachment, spatial identity and adaptive capacity, the conceptual model of the research was explained and defined and a structured questionnaire was designed based on it. Citizens and residents of area one of Tehran, according to the conditions of modern buildings in this area, were selected as the study sample. Therefore, after distributing the research questionnaire and reviewing these data by structural equation modeling, the research findings were reported. The results obtained from the findings showed that spatial attachment alone and directly will not be able to build an identity in the modern city and it is necessary for the presence of a mental adaptation in citizens' perceptions of the new environmental conditions.

Research aims:

1. Achieving the indicators of spatial attachment of the citizens of region one of Tehran from modern views.
2. Recognition and study of the effect of spatial attachment of modern urban views on the formation of spatial identity in the citizens of region one of Tehran.

Research questions:

1. What are the indicators of spatial attachment in the citizens of region one of Tehran?
2. Modern urban landscapes, considering the adaptive capacity of individuals, how and through what mechanism do they affect their spatial identity in a region of Tehran?

Keywords: Spatial attachment, Spatial identity, Adaptive capacity, Urban views, Tehran.

Introduction

A study of the historical periods of architecture of residential buildings after the Islamic Revolution in Iran displays that during the last three decades, there has been a significant change in the architectural facade from the traditional state and with a spatial identity of the past compared to modern and classical facades. This has caused the mental image of the Iranian citizen to change in relation to the residential facades and to face a kind of identity crisis since there is a fundamental change in the form and body of these residential facades. Many experts in the field of environmental psychology believe that the contact of people with the environment in which they live and the satisfaction of their needs by the environment, gradually leads to dependence on that environment and the emergence of spatial attachment. Despite the extensive changes and transformations that have occurred in the body of residential building facades in the form of their facades, however, it seems that the use of these places over time increases the spatial attachment within them and this leads to mental adaptation of the people. Considering the role that architecture has as an environmental feature in identifying individuals, the study of this issue in the architecture of Tehran can be considered as a social and cultural necessity.

Regarding the background of the present study, it should be said that so far no independent work with this title has entered the field of research, but works in the field of the role of architecture in identification have been written in Iran. An article entitled "The Role of Design and Execution Quality in the Realization of the Concept of Identity in Contemporary Iranian Architecture" by Mahdavi Nejad and Talib Hashemi has been written. The authors of this work believe that the issue of identity is one of the important issues in contemporary Iranian architecture. Also, considering the correlation between the two parameters of identity and quality of design and execution, one of the factors that can help promote the concept of identity is the quality of design and execution, which itself depends on different factors such as the expressed indicators. And according to the share of each of these factors, they can be helped. These characteristics and efforts to promote them can help to realize the concept of identity in contemporary Iranian architecture (Mahdavinejad, Talib Hashemi, 2018: 103). According to the above points, this study seeks to investigate the effects of place attachment in modern residential building facades based on the adaptive capacity of individuals and the formation of new spatial identity. To achieve this goal, a questionnaire survey method based on a conceptual model extracted from the theoretical foundations of the research was used and the citizens in area one of Tehran were studied.

The research method used in this research is descriptive-analytical with a quantitative approach. Research methodology has been done through statistical analysis and inferential; Thus, first, through library studies, the existing literature in this field has been studied and the opinions and thoughts of experts have been extracted. Then, based on three indicators, extracted from the research literature, a conceptual model of the research was extracted and then based on it, a structured questionnaire of 15 questions based on a 5 Likert scale was designed and distributed among citizens in a district of Tehran. Finally, the questionnaire codes were extracted and analyzed in SPSS and Smartpls software by structural equation modeling. There are two general approaches when modeling structural equations: the first approach is based on CB-SEM and the second approach is based on the use of PLS-SEM. In this regard, Wang et al. (2019) state that one of the conditions that justifies the researcher to use the PLS method in his extracted model is the novelty

of the conceptual model of the research. In other words, if the conceptual model of the research is done in order to fill the knowledge gap in the subject or in a specific geography, the use of the PLS method is more preferable due to its flexibility and proximity to human language. Therefore, due to the innovative conceptual model of the present research in the related knowledge range, the current research model has been investigated using structural equation modeling method and Partial Least Squares technique in SmartPLS software.

Conclusion

In the present day, due to the growth of urban population in developing countries due to large-scale migration to cities, we are witnessing an increase in building density and, consequently, the growth of multi-storey or high-rise residential, office and service buildings. This has caused the facades of the building, which are presented to the viewer in the form of stripping plates in the walls of the main and secondary arteries of the cities, to be of considerable prominence and to somehow become the architectural representative of that building. Also, the increase in the construction of residential buildings and supply beyond the needs of these buildings has caused designers and architects with different approaches and methods to try to show their creativity in the desired building and the requirements of their employer based on to attract citizens and applicants to provide housing.

Nevertheless, the tastes of the Iranian citizen have changed from the past to the present between the dichotomy between tradition and modernity. This has created an identity crisis for him to understand the body in which he lives. In this regard, this study sought to investigate how to change and reconstruct this spatial identity by considering the two factors of spatial attachment and adaptive capacity in them. Also, modern building facades in area one of Tehran as a prominent example of the change of body from tradition to modernity was selected as a case study. In this regard, after reviewing the concepts of spatial attachment, adaptive capacity and spatial identity, a conceptual model was explained and based on it, a structured questionnaire was designed using the Likert 5-choice spectrum. After distributing the questionnaire, the data were analyzed by structural equation modeling using SmartPLS software. The results showed that spatial attachment, alone and directly, is not able to influence the process of identification of urban facades in the form of modernity. Examination of other relationships extracted from research data showed that there is a significant and effective relationship between spatial attachment and adaptive capacity of individuals as well as between adaptive capacity and spatial identity. Given the relatively strong intensity of these relationships, it can be said that the body of modern views is first perceived by individuals and over time with the degree of adaptability of each individual, which originates from his social, environmental and economic conditions will be coordinated and eventually lead to the process of building a spatial identity in the final stage.

References

Mahdavinejad, Mohammad Javad, Talib Hashemi, Seyedeh Sara (2017), "Quality of design and execution in the realization of the concept of identity in contemporary Iranian architecture", Quarterly Journal of Architectural Thought, No. 1, pp. [in Persian]

Abadianian Residential Community, Hamedan, Iran. "Research Journal of Environmental and Earth Sciences 5.11 (2013): 645-650.

- Brooks, N., Adger, W.N., Kelly, P.M., 2005. The determinants of vulnerability and adaptive capacity at the national level and the implications for adaptation. *Glob. Environ. Change* 15, 151–163.
- Cutter, S.L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E., Webb, J., 2008. A placebased model for understanding community resilience to natural disasters. *Glob. Environ. Change* 18 (4), 598–606.
- De Loe, R.C., Kreutzwiser, R., 2000. Climate variability, climate change and water resource management in the Great Lakes. *Climatic Change* 45, 163–179.
- DeVries, J., 1985. Historical analysis of climate – society interaction. In: Kates, R.W., Ausubel, J.H., Berberian, M. (Eds.), *Climate Impact Assessment*. Wiley, New York.
- Feitelson, E., 1991. Sharing the globe: the role of attachment to place. *Global Environmental Change* 1, 396–406.
- Fresque - Baxter, J. A., & Armitage, D. (2012). Place identity and climate change adaptation: a synthesis and framework for understanding. *Wiley Interdisciplinary Reviews: Climate Change*, 3 (3), 251-266.
- Gheitarani, N., El-Sayed, S., Cloutier, S., Budruk, M., Gibbons, L., & Khanian, M. (2020). Investigating the Mechanism of Place and Community Impact on Quality of Life of Rural-Urban Migrants. *International Journal of Community Well-Being*, 3 (1), 21-38.
- Gifford, R. (2011). The dragons of inaction: Psychological barriers that limit climate change mitigation and adaptation. *American Psychologist*, 66 (4), 290.
- Habibi, K., Hoseini, S. M., Dehshti, M., Khanian, M., & Mosavi, A. (2020). The Impact of Natural Elements on Environmental Comfort in the Iranian-Islamic Historical City of Isfahan. *International Journal of Environmental Research and Public Health*, 17 (16), 5776.
- Kim, J., & Kaplan, R. (2004). Physical and psychological factors in the sense of community new urbanist Kentlands and nearby Orchard Village. *Environment and behavior*, 36 (3), 313-340.
- Low, S. M., & Altman, I. (1992). *Place attachment* (pp. 1-12). Springer US.
- Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Place-identity. *Journal of Environmental Psychology*, 3, 57-83.
- Raymond, C. M., Brown, G., & Weber, D. (2010). The measurement of place attachment: Personal, community, and environmental connections. *Journal of Environmental Psychology*, 30 (4), 422-434.
- Scannell, L., & Gifford, R. (2010). The relations between natural and civic place attachment and pro-environmental behavior. *Journal of Environmental Psychology*, 30 (3), 289-297.

Seara, T., Clay, P. M., & Colburn, L. L. (2016). Perceived adaptive capacity and natural disasters: A fisheries case study. *Global Environmental Change*, 38, 49-57.

Smit, B., Pilifosova, O., 2003. From adaptation to adaptive capacity and vulnerability reduction. In: Smith, J.B., Klein, R.J.T., Huq, S. (Eds.), *Climate Change, Adaptive Capacity and Development*. Imperial College Press, London.

Smit, B., Wandel, J., 2006. Adaptation, adaptive capacity and vulnerability. *Global Environmental Change* 16 (3), 282–292.

Smith, C., Clay, P.M., 2010. Measuring subjective and objective well-being: examples from five commercial fisheries? *Hum. Org.* 69 (2), 158–168.

Trentelman, C. K. (2009). Place attachment and community attachment: A primer grounded in the lived experience of a community sociologist. *Society and Natural Resources*, 22 (3), 191-210.

Wagner, M., Chhetri, N., Sturm, M., 2014. Adaptive capacity in light of Hurricane Sandy: the need for policy engagement. *Appl. Geogr.* 50, 15–23.

Wang, J., & Wang, X. (2019). *Structural equation modeling: Applications using Mplus*. John Wiley & Sons.