

Assessment of Correlation between Built Environment and fear of Crime in the “Mehr” Housing Project (Case Study: Pakdasht County, Iran)

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Received: 21 February 2017 Accepted: 04 February 2018

Extended abstract

Introduction

Nowadays, crime is one of the core problems in human societies, especially in cities. This is a problem that human community with all the advances and abilities failed to control up to now. Criminologists have often considered several factors in criminology theory for instance environment and environmental characteristics that played a crucial role in criminal impetus and motivation in urban spaces. Also, there is theoretical and empirical literature in the field of criminology highlighting noteworthy relationships between several indicators of built environment and crime patterns. The identification of the variables related to crime could allow policymakers in private and public sectors of housing industry to develop improved approaches to combat crime by developing better strategies and policies for proper planning and design. The “Mehr” housing project is one of the most recent projects undertaken by the Ministry of Roads & Urban Development. Despite the main aim of the project which is to accommodate low income citizens, recent studies demonstrated that the living condition in this housing project is not satisfactory because it was formulated and developed regardless of safety and security aspects of built-environment quality. The purpose of this research is to identify those effective factors contributing to environmental safety and crime in Mehr public housing, e.g., in the Imam Reza Pakdasht in the Tehran City, Iran, where the houses are not safe and secure the low quality of environment.

Methodology

This study has a descriptive – analytical research method. For this purpose, two groups of objective and subjective factors are used to test the hypothesis of this research. Data have been obtained from questionnaires distributed to a randomly selected sample of 384 respondents. The sample number has also been determined by using Cochran formula. Additionally, the interview

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technique was applied to gather data from the residents. Hence, factor analysis and linear regression are used to analyze the data obtained through questionnaire and field survey. As the first step of analysis, indices of environmental safety and crime are discussed. The indices have been classified into objective and subjective groups. It should be noted that this study mainly focused on the subjective indices than the objective ones. In the next step, factor analysis has been used for the analysis. KMO test is equal to 0.811, which made it possible to continue of the analysis using factor analysis. The factor analysis has been used to develop the four factors affecting "environmental safety" including: physical factors, social structure, satisfaction factors, and safety factors.

Results and discussion

The last step of the analysis is related to identification of the underlying factors which affect the extent of environmental safety. These factors are evaluated through the use of other criteria such as the expanse of migration and level of economic hardship and poverty. For this purpose, linear regression was used. Furthermore, the results of this study have revealed that these factors are directly related to environmental safety and crime. The physical factor has defined more than 23% of the variance of the total data to indicate how many physical factors affect the crime in the Mehr housing complex. The lack of attention to the environment design and its role in the emergence of social issues is one of the most prominent features of the complex. The second factor has explained only 15.67 of the total variance that show significant difference. Satisfaction is defined by the variables of satisfaction of housing, satisfaction of income, dissatisfaction of access to services and dissatisfaction of housing. This has indicated that life satisfaction is always one of the important factors in preventing crime and social harm. Due to the low level of security in the Mehr housing complex, the existence of this factor (security) was not expected. The low level of interactions and the lack of police in the complex are the most important items increasing the crime.

Conclusion

The results of this study suggest that poverty of the residents as objective factor and physical conditions as subjective factors are the most significant variables contributing crime in Mehr public housing. Additionally, these results are in accordance with those previous researches that concluded that the communities with low efficacy in social indicators such as social cohesion, stability of the population, and family disruption are likely to record more crime. Furthermore, relationships in physical qualities of built environment including high-density, inappropriate access to network, existence of ruined and abandoned areas emphasize on this fact that our opinion about the correlation between built environment and crime is more plausible.

Keywords: crime, urban environment, poverty, Pakdasht, Mehr Housing.

References

1. Atlas, R, I., 2008, 21st Century Security and CPTED: Designing for Critical Infrastructure Protection and Crime Prevention. By Taylor and Francis Group, LLC.
2. Bennett, T., 1986, Situational Crime Prevention from the Offenders' Perspective. Heal & Laycock, 41-52.
3. Cohen; Deborah. 2008, The built environment and collective efficacy; Health & Place; pp 198°208.
4. Carmona, M., punter, J. & Chapman, D. 2002, From Design Policy to Design Quality: The treatment of design in community strategies, local development frameworks and action plans, London: Thomas Telford Publishing.

5. Chricos, T., 1997, Racial Composition of Neighborhood and Fear of Crime, *Criminology*, No 35: 107-129.
6. Cinar; Eylem Akman. Cubukcu; Ebru. 2012, The Influence of Micro Scale Environmental Characteristics on Crime and Fear, *Social and Behavioral Sciences*, procedia, pp 83-88.
7. Cozens, P., 2008, Crime prevention through environmental design (CPTED) in Western Australia: planning for sustainable urban futures.
8. Crank, John and Andrew, Gia Comazzi. 2003, Fear of Crime in Nonurban Setting, *Journal of Criminal Justice*, 31.
9. Crowe, T.D., 2000, *Crime Prevention through Environmental Design*, Stoneham, MA: Butterworth-Heinemann, 2000, PP.87_95.
10. Geason, Susan & Wilson, Paul R., 1989, *Designing Out Crime: Crime Prevention Through Environmental Design*, Australian Institute of Criminology, Canberra. Grohe, Bonnie Rae 2006, *Perceptions of Crime, Fear of Crime and Defensible Space in Fortworth Neighborhoods*, Dissertation for the degree of Doctor of Philosophy, University of Texas At Arlington.
11. Jacobs, J., 1961, *The Life and Death of Great American Cities*, New York, Random house.
12. Kaplan, R&Kaplan, S., 1989, *The Experience of Nature: A Psychological Perspective*, Cambridge University, USA.
13. Jeffery, C.R., Zahm, D.L., 1993, "CPTED, Opportunity Theory and Rational Choice Model", in *Routine Activity and Rational Choice*, *Advance in criminology theory*, vol 5, edited R.Clarke, New Brunswick.
14. Lane, Jodi and James W Meeker. 2005, *Theories and Fear of Gang Crime among Whites and Lathinos: A Replication and Extension of Prior Research*, *Journal of Criminal Justice*, Vol. 33.
15. Madriz, Esther. 1997, *Nothing Bad Happens to Good Girls: Fear of Crime in Woman's Lives*, Berkeley, University of California Press.
16. Nasar, J.L., & Jones, K. 1997, Landscapes of fear and stress. *Environment and Behavior*, 29, 3, 291-323.
17. Schneider, R. H. & Kitchen, T., 2007, *Crime Prevention and the Built Environment*. New York: Routledge, New York.
18. Southworth, M., 1989, Theory and Practice of Contemporary Urban Design, *Town Planning Review*, 6(4), PP. 369-402.
19. Wilson J. Q. & Killing, G., 1982, Broken Windows, *Altantic Monthly*, 211.
20. Zebardast, E., 2009, The Housing Domain of Quality of Life and Life Satisfaction in the Spontaneous Settlements on the Tehran Metropolitan Fringe, *Social Indicators Research series*, 9, 307-324. <http://dx.doi.org/10.1007/s11205-008-9260-5>.
21. Ahmad Abadi, Z and Salehi Hikouei, M and Ahmadabadi, A, 2008, Relationship between place and crime, *Social welfare quarterly*, seventh year, No 27.
22. Bayat, B, 2008, Sociological Explanation of the Sense of Security among Tehrani Citizens (Emphasizing the Role of Media Payments and Social Capital), *Journal of Social Sciences*, No 16, pp 132-115.
23. Esfandiari, I, 2003, Poverty and Social Deviations, *Scientific-Research Quarterly of the Social Cultural Council of Women*: No 21.
24. Fazel, R, Miri Ashtiani, E, 2008, Social injuries, Future look, *Strategic Studies Research Institute*.

25. Fukuyama, F, 2000, End of the Order of Social Capital and Its Preservation, Translation by Gholam Abbas Tavassoli, Jame'e Iranian Publication, Tehran.
26. Jacobs, J, 2007, Death and Life of American Major Cities, Hamid Reza Parsi and Arezoo Platoni, University of Tehran Press.
27. Taghvaei, 2010, Investigation and comparison of 6 crime indicators at the level of 6 regions of crime in Shiraz, Geography (Iranian Geographical Association), No. 26.
28. Kalantari, M, Salami Beyrami, A, 2011, Urban Design and Crime Prevention, Zanjan Azar Kalak Publishing.
29. Kalantari, Mohsen and others, 2010, Investigating the impact and extent of land use in the formation of criminal offenses using the GIS. A Case Study of Drug Trafficking and Drug Abuse in Qazvin, Journal of Policymaking, 11 th issue.
30. Kinya, M, 2014, Criminology Foundations, University of Tehran Press.
31. Mohseni Tabrizi, A, 2004, Vandalism: The Basics of Social Psychology, An Publications, Third Edition, Tehran.
32. Momtaz, F, 2002, Social deviations, Tehran: Sherkat Sahami Enteshar Publishing.
33. Mousavi, S, 1999, Theoretical and Sociological Explanation of Urban Crime, Political and Economic Information Monthly, No143 - 144.
34. Ould, George and others, 2001, Theoretical Criminology, Translated by Ali Shojaei, Samt Publications, Tehran.
35. Rahma, M, 2006, The Role of Environmental Design in Crime Prevention, Guilan Quarterly Journal, No 8 & 9.
36. Salehi, I, 2008, Features of Secure Urban Space, Center for Research and Development of Urban Planning and Architecture, Tehran.
37. Sotoudeh, H, 2010, Social Pathology (Sociology of Deviations), Avaya Noor Publications, Tehran.