Key Factors Influencing the Planning of a Creative City (Case Study: Urmia)

Hussain Nazmfar[1*] , Ahmad Aftab[2], Ata Ghafari Gilandeh[3], Mirnajaf Mousavi[4]

1. Associate Professor in Geography and Urban Planning, University of Mohaghegh Ardabili, Ardabil, Iran
2. PhD in Geography and Urban Planning, University of Mohaghegh Ardabili, Ardabil, Iran
3. Associate Professor in Geography and Urban Planning, University of Mohaghegh Ardabili, Ardabil, Iran
4. Associate Professor in Geography and Urban Planning, Urmia University, Urmia, Iran

Received: 18 September 2017 Accepted: 03 March 2018

Extended abstract

Introduction

The 21st century is a century of urbanizationinfluenced by globalization that affected the economic and social issues in most cities in the world. The economic and social processes, such as transfer of international capital, the steady increase in mobility and shifting of the talents and labor force of companies, are widespread today in most cities around the world. This can clear the need for innovation and specialized services and dynamic and interconnected networks to connect the local level to a vast geography of global markets. Cities in the world are highly competing in the context of the global economy as network nodes. These cities need to offer specialized products and creative services to global markets to participate in the global economy. They are also seeking to attract foreign capital and talent for sustainable economic development. However, it should be noted that these competitive advantages are not deployed anywhere in any city. The creative city is a new initiative evolved from a state of emergency to a new transition to emphasize on simultaneous attention to technology, infrastructure, manufacturing and human resources. In this regard, the present study aims to identify and analyze the key factors affecting the planning of the city with emphasis on the city of Urmia, to answer the following questions: What is the status of the system is how to analyze the variables in terms of stability and instabilityAnd to analyze the key factors in creative urban planning in Urumia

Methodology

This is an applied research in terms of nature and it is based on new methods of future study and exploratory science. In this research, data have been gathered to study the components of creative city in 10 main criteria including scale, creative industries, creative class, creativity infrastructure, efficiency and effectiveness, vitality, communication technology, social diversity, social capital, and quality of life. The analysis has 16 sub-criteria and 106 indicators based on careful examination of external and internal resources in order to answer the research questions in the scope of the study. There are two types of documents including secondary data and surveying initial data. The tools used in the survey method were questionnaires and interviews.

* Corresponding Author: nazmfar@uma.ac.ir Tel: +989143019909

The statistical population of this research is 30 persons of professors and experts in the subject matter of the research. To analyze the data, a combination of expert panel methods, cross-impact analysis, and MicMac software have been used.

Results and discussion

According to the research criteria, 100 factors using MicMac software have been analyzed to choose the main factors influencing the development of the creative city in Urmia. Dimensions of the matrix were 100 × 100, with10 different sections. About 60.13% of the matrix is filled by the respondents. This indicates that the selected factors have a relatively high and dispersed effect on each other. Of the total of 6013 relationships in this matrix, 3987 is the ratio of zero. This means that the factors do not affect each other or have not been mutually exclusive. The number one is 2106 relationships (representing that they have little effect on each other. Up to 2174 relationships, which their number was 2, represnt that they had a fairly strong influence. Up to 1040 relationships have number 3, meaning that key factor relationships have been very influential and influencive. Finally, there were 693 relationships, their number P, which indicated the potential and indirect relationships of the factors.

The distribution of variables in the dispersion shows the stability or instability of the system. This first analysis of the state of the system shows how to analyze effective variables. The output of the system indicates the dispersion of the influencing variables in the creation and development of urban creativity in Urmia. The instability situation in the system is further affected by independent variables. There are a few other factors indicating that they have a high influence on the system and the rest of the variables are in a similar situation to each other, with only varying degrees of intensity and weakness. Therefore, the variables have two direct and indirect effects which each of them are decisive or influential variables, two-sided variables, influencive variables, independent variables, and regulatory variables. They are discussed in terms of the distribution of variables in the software output graph.

Conclusion

The results of the research and the distribution and dispersion of the variables on the dispersion page indicate the system's instability. In the analysis of 100 variables selected by the MicMac software, the 15 factors were selected as the key factors given that they had the most important direct and indirect effects. Among these key factors, performance of service organizations has had the greatest impact on the planning of Urumia creative city. Distribution of urban services and population has been selected as the most effective factors in the planning of a creative city. We have selected 15 key factors. Six factors including physicians, lawmakers and top-level people, bachelors, technicians, specialists, masters and PhD professionals, and number of artists are related to the creative class and three factors including number of research and development units, number of researchers, and number of universities are related to creativity infrastructure. This indicates its high impact on the planning of Urmia creative city.

Keywords: creative city, cross-impact analysis, Mick Mac, Urmia City.

References

1. Akbari Motlagh, Mostafa. 2014, Investigating the Dimensions of Creative City Theory and Its Influence on Sustainable Urban Development with Emphasis on Global Trade, National Conference on Sustainable Architecture and Urban Development, Bukan. [In Persian].
2. Beheshti, Mohammad Bagher., Zali, Nader. 2012, Identification of key factors of regional development with a scenario-based planning approach (case study of East Azarbaijan Province), The Journal of spatial Planning, Vol. 15, No. 1, pp. 41-63. [in Persian]
3. Bianchini, F., Landry, ch., 1994, The creative city. Published by Comedia, UK.
4. Coletta, C., 2008, Fostering the Creative City, cities, No. 6, pp. 1-24

5. Cooke, P., Lazzeretti, L., 2008, Creative Cities, Cultural Clusters and Local Economic Development, Cheltenham, UK; Northampton, MA: Edward Elgar.
6. Donegan, M., Lowe, N., 2008, Inequality in the Creative City: Is There Still a Place for "Old-Fashioned "Institutions?, Economic Development Quarterly, Vol. 22, No. 1, pp. 46-62.
7. Duxbury, Nancy., 2004, Creative Cities: Principles and Practices,Canadian Policy Research Networks Inc, Web Site: http://www.cprn.org.
8. Fritsch, Michael,. Stutzer, Michael., 2008, The Geography of Creative People in Germany, German Institute for Economic Research (DIW), Germany; Berlin.
9. Florida, R., Kennedy, M., 1988, "Venture capital, high technology and regional development" Regional Studies, No. 22, pp. 33-48.
10. Florida, R., 2002, the economic geography of talent, Annals of the Associations of American Geographers, Vol. 92, No. 4, pp. 743–755.
11. Florida, Richard., 2005, Cities and the Creative class, City & Community, Vol. 2, No. 1, pp 3–19.
12. Florida, Richard., 2008, Discovering How Technology Talent and Tolerance Affect the New Economy. www.visionbroward.org.
13. Girardet, T. D., 2008, Efficacy and Safety of a Paired Sedation and Ventilator Weaning Protocol for Mechanically Ventilated, Lancet, England.
14. Godet, M., 2006, Creating futures: Scenario planning as a strategic management tool. Washington, DC: Economica.
15. Ghorbani, Rasool., Hossein Abadi, Saeid., Torani, Ali. 2013, Creative Cities; A Cultural Approach to Urban Development; Geographical Study of Arid Areas, No. 11, pp. 1-18. [in Persian]
16. Gordon, T. J., 1994, Cross-impact method, AC/UNU Millennium Project. Futures Research Methodology. Greenwood Press.
17. Garnham N, (2005b), From cultural to creative industries: an analysis of the implications of the 'creative industries' approach to arts and policy making in the United Kingdom, International Journal of Cultural Policy, No.11, pp. 15-30.
18. Gertler, M. S., 2004, Creative Cities: What Are They For, How Do They Work, and How Do We Build Them?, Canadian Policy Research Networks, [online], available from: www.cprn.org [last accessed: 21/4/2010].
19. Landry, C., 2008, The Creative City: It is Origin and Future urban design, Comedia, UK.
20. Malekzadeh,Neda., Bazzazzadeh, Mehdi., Rafieiyan, Mojtaba. 2017, Identification and Analysis of the Effective Key Factors on Urban Development Using Foresight Approach A Case Study of Karaj Metropolitan Area, Journal of Geography and Urban Space Development, Vol. 3, No. 2, pp. 35-52. [In Persian].
21. Mansori, sara., Zali, Nader. 2016, Analysis of Key Factors Affecting the Development of Sustainable Transport in the 1404 Horizon of Tehran Metropolis (structural analysis method), The Journal of spatial Planning, Vol. 19, No. 2, pp. 1-32. [In Persian]
22. Mirgholami, Morteza; Shokrani Dizaj, Mahsa; Sediqfar, Amin; Mousaviyen, Seyedeh Maryam. 2014, Investigating the security of enclosed enclosures using the method of determining the spatial coefficient and crime rates (Case study: Urmia City), Urban Studies Quarterly, No. 16, pp. 55-66. [in Persian]
23. Mokhtari Malek Abadi, Reza., Marsousi; Nafiseh., Ali Akbari, Ismail., Amini, Davood. 2015, Explaining Localization Indicators of the Spatial of Creative City with Iranian Islamic Approach, Quarterly Journal of Iranian Islamic Studies, No. 22, pp. 23-39. [in Persian]
24. Mousavi, Mirnajaf . 2014, Ranking the Districts of Sardasht City In Terms of Moving Toward Creativity With an Emphasis on Realization Creative City by the Use of TOPSIS Model and Network Analysis, Geography Magazine and Urban-Regional Journal, No. 10, pp. 19-38. [in Persian]

25. Musterd, S., 2010, The Creative Cultural Knowledge City, Some Conditions. Paper presented at the University of Kaiserlautern.

26. Nazmfar,Hossein., Aftab, Ahmad., Nazampour,Nahid., Majnoony Tootakhane, Ali . 2016, Evaluation and prioritization of urban areas Based on parameters creative city (Case Study: Sanandaj City), The Journal of spatial Planning, Vol. 20, No. 4, pp. 259-286. [In Persian]

27. Rabbani Khorasgani, Ali., Rabbani Khorasgani, Rasoul., Adibi Sadeh; Mahdi., Mo'azeni, Ahmad. 2012, Investigating the Role of Social Diversity in Creating Innovative and Creative Cities (Case Study: Isfahan City), The Journal of Geography and Development, Vol. 9, No. 21, pp. 159-180. [In Persian]

28. Rafieeyan, Mojtaba; Shabani, Morteza. 2015, Analysis of Urban Creativity Indices in Settlement System of Mazandaran Province, Journal Management System, No 16, pp. 19-34. [in Persian]

29. Rahnama, Mohammad Rahim., Aftab, Ahmad. 2014, Location of fire stations in Urmia using GIS and AHP. Geography and development. No. 35. pp. 166-153. [in Persian]

30. Sasaki, M., 2008, Developing Creative Cities through Networking. Policy Science, Vol. 15, No.3, pp. 77-88.

31. The Centre for Cultural Policy Research., 2004, A study on Hong Kong creativity index, Interim report, The University of Hong Kong & Home Affairs Bureau.

32. Vickery Jonathan, 2011, Beyond The Creative Cities- Cultural Policy in an age of scarcity, For made: a center for place-making birmingam, Birmingham.

33. Yusuf, Shahid., Nabeshima, Kaoru., 2005, Creative industries in East Asia, Cities, Vol. 22, No. 2, pp. 109-122.

34. Zanganeh Shahraki, Saeed., Fotouhi Mehrabani, Bagher., Porakrami, Mohammad., Soleimanzadeh, Mohammad Reza. 2017, Journal of Geography and Urban Space Development, Vol. 3, No. 2, pp. 69-85. [In Persian].

Identification of Effective Factors Creating Space in Periphery of Cities (Case Study: Urmia City)

Hassan Esmaeilzadeh[1*], Shamsi Salehpour[2], Zari Ghasemian[2], Abozar Mazaheri[2]

1. Assistant Professor, Department of Environmental Planning and Design, Shahid Beheshti University, Tehran
2. PhD Student in Geography and Rural Planning, Kharazmi University, Tehran, Iran

Received: 21 April 2017 Accepted: 27 February 2018

Extended abstract

Introduction

Peripheral urban space is part of the environment formed by living spaces with different characteristics. Peripheral urban space includes built areas, network of connecting routes, headquarters, industrial enterprises, transportation companies, orchards, and places for entertainment and games. This means that it is part of the space that is available for residents of the areas around the cities. Geographical theories state that production of space around the cities, in addition to physical factors, are dependent upon some other factors including perceptions, beliefs, opinions, ideologies, cultural features, level of awareness, way of thinking, and cultural, economic and political systems.

A glance at the history of Urmia City in the Northwest Iran, West Azarbaijan, shows that production of peripheral urban space in Urmia is resulted from some factors such as groups and social, economic and political classes, multiple sources of income, proximity to the city center, land speculation, achieving greater profits and so on. This indicates that creation of residential, industrial, service, and communication spaces not only led to the concentration of capital, activity and population, but also developed speculative activities and bribery culture. Accordingly, the purpose of this study is to investigate the process of production of space in the areas around the cities. Using satellite images, we attempt to identify the areas developed within the radius of 15 kilometers from the city of Urmia during the years 2000-2014. Then, we try to identify the factors and mechanisms leading to the production of space in the areas around the cities.

Methodology

The present study is a mixed research using qualitative and quantitative approachs in terms of methodology through continuous explanatory research project. This study is an applied research due to its methods and library and field methods for data collection. In analysis of data in quantitative phase of this research, we examined the generated spaces by satellite images of TM and OLI Landsat Satellite during two time series of years 2000 and 2014. The statistical population is the agencies related to urban and rural affairs including Agriculture Organization, Office of Governor General, Office of Governor, Office of District Governing, etc. Sampling was non-randomly based on snowball sampling. In collecting data, we used in-depth and semi-structured interviews and direct observation.

* Corresponding Author: h_esmaeilzadeh@sbu.ac.ir Tel: +989125379322

Results and discussion

The analysis obtained by classifying spaces indicates that in 2000 and 2014, the area of residential, industrial, green, empty and barren spaces and connecting networks is about 115245.949 hectares. Among the studied spaces, residential (3069.28 hectares), industrial (4736.73 hectares) and connecting (0.1866 hectares) spaces have increased in production. This is resulted from decreases in green spaces (farms, orchards, pasture and forests) and empty and arid spaces. Increase in the area of the producted spaces in the study area had been due to changes occurred in many spaces. After identifying the areas around the city of Urmia, the foundations affecting the production of space in these areas were discussed during the period of the study. In order to achieve the factors influencing the production of space in the areas around the city, we used the method of Grand Theory. As a result of grounded theory method, the factors affecting the production of peripheral urban space include: Suburbanization, economic diversification, inefficient management, Weak laws, modernization policiesand capitalism system such as the Commission on Article 100 of municipalities.

Conclusion

The spaces generated in the study area including the economy, politics, culture, society, and nature.According to the analysis and school of political economy of space, the most important factors affecting space production around the cities are suburbanization, economic diversification, inefficient management, weak legistation, modernization policies and capitalism system. The produced spaces in the areas around the cities are developed to provide basic needs and achieve higher profits. The spaces had some consequences including increased migration from village to city, rising inflation and the government's inability to solve the high inflation, impairment in planning system, overloaded variety of activities in the lands, mass production of varieties of space, capital accumulation and commodification of land, increase in the culture of bribery, destruction of green spaces, exploitation of natural resources, increase in social and economic deseases, components of space caused by capitalism, including speculation in the production of space, and the segregation of space due to it and so on. Today peripheral urban areas are separated and divided with manipulation for sale as a commodity. Results also have revealed speculative and rent-seeking tendencies in the areas around the cities. Unless this trend stops to continue, it will cause irreparable damage to the natural ecosystem of the area. Therefore, it can be concludded that the areas around the cities are considered as the consequences and initiatives of capitalism.

Keywords: space, production of space, political economy of space, peripheral urban areas, Urmia.

References

1. Adib Hajbagheri; M., P., and Mahvash S., 2007; Qualitative Research Methods, Bashari Publications, Second Edition. [In Persian]
2. Afrakhteh, H., Hajipour, M., 2015, Political Economy of Space and regional equilibrium of Iran, space economics and Rural Development journal , Vol. 4, No. 4, pp. 14, pp. 110-87. [In Persian]
3. Afrouh, I., 1998, Space and Social Inequality: Study of Spatial Separation and the concentration of poverty in residential neighborhoods of Tehran, PhD. in Sociology, Supervisor: Hossein Shokouie, Tarbiat Modares University, Tehran. [In Persian]
4. Amiri, N., Rezapur, A., 2012, Henry Lefebvre and Social Production of Space, Media Culture Journal, Vol 1, No. 4, pp. 16-1. [In Persian]
5. Babbie E., 2002, the basics of social research. 2nd ed. ed. Belmont, Calif; London: Wadsworth/Thomson Learning.

6. Buxton, M. A., Andrew Butt, S. F., Danny O., 2008, Planning Sustainable Futures for Melbourne Peri-urban Region, RMIT University, and Melbourne.
7. Borekpour, N., Asadi, I., Basirat, M., 2010, Typology of privacy and global experiences in planning and managing, Shahr-Negar's two-letter paper, No. 57-56, pp. 38-17. [In Persian]
8. Castells, M., 1977, the Urban Question. UK. Cambridge, the MIT Press.
9. Cohen, G. A., 1978, Karl Marx's Theory of History, Oxford, Oxford University Press.
10. Cuthbert, Alexander R., 2006, the Form of Cities: Political Economy and Urban Design. New York: Wiley-Blackwell.
11. Daneshpour, Z., 2006, Analysis of spatial inequality in peri-urban environments An attempt to use strategic planning and management approach in Tehran, Fine Arts, No. 28, pp. 14-5. [In Persian]
12. Dananifard, H., 2005, Theorization using a deductive approach: The conceptualization Strategy Grounded Theory, Shahid University Journal, Vol 12, No. 11, pp. 70-57. [In Persian]
13. Dolphos, O., 1995, Geographical Space, Translation of Cyrus Sahami, Nika Publishing, Second Edition, Mashhad. [In Persian]
14. Dávila, J. D., 1999, A Review of policies and strategies affecting the peri-urban interface, Strategic Environmental Planning and Management for the Peri-urban Interface Research Project, Development Planning Unit (DPU) University College London, 1999.
15. Harold, C., 1989, the Study of Urban Geography, 3rdEdition. http://www.iribnews.ir/NewsText.aspx?ID=1657118, 1989.
16. Harvey, D., 1998, the role of planning in capital societies (Athari, K. Trans.), Architecture and Urbanism, 7(45&46), 73-75.
17. Harvey, D., 1997, City and The Justice (Hesamian, F. , &Haeri. M.R. , & Monadizadeh, B. : Trans.). Tehran: Publication of Pardazesh va barnamerizi Shahri
18. Harvey, D., 1978, Urbanization under Capitalism: a Framework for Analysis, International Journal of Urban and Regional Research, vol. 2, pp. 101-31.
19. Hataminejad, H., Abdi, N., 2007, Political Economy and Urban Space, Economic - Policy Journal, No. 238-237, pp. 205-196. [In Persian]
20. Imani Sh. J., Rafieian, M., Dadashpour, H., 2016, Urban Propaganda and Spatial Divergence Analysis of Spatial Transformations of Tehran Metropolis Based on Oil Economy, Geopolitics Journal, Vol 12, No. 1, pp. 135-104. [In Persian]
21. Jalalian, H., 2013, Urban Creep Analysis and Land Use Change (Comparative Study of Urmia and Isfahan), Spatial - physical planning Journal, Vol 2, No. 4, pp. 98-73. [In Persian]
22. Katouzian, M. A., 2003, Iran's political economy from onstitution to the end of the Safavi Dynasty Translation by Mohammad Reza Nafisi and Kambiz Azizi, Ney Publication, Ninth Edition, Tehran. [In Persian]
23. Lefebvre, H., 1976, the Survival of Capitalism. New York: St. Martin Press.
24. Lefebvre, H., 2009, State, Space, World, Selected Essays, Edited by Neil Brenner and Stuart Elden, Translated by Gerald Moore, Neil Brenner, and Stuart Elden, University of Minnesota Press, Minneapolis London.
25. Mobaraki, O., Mohammadi, J. Zarabi, A., 2013, Presentation optimal physical-spatial pattern of Urmia, Geography and Development Journal, No. 32, pp. 88-75. [In Persian]
26. Mohamli Abyane, H. R., 2011, Comparative Comparison Urban Morphology Studies in order to complete it based on the analytical system of the Political Economy of Space, Arman Shahr Journal, No. 7, pp. 171-159. [In Persian]
27. Mohammadpour, A., 2010, meta-method Philosophical and practical foundations mixed research method in social and behavioral sciences, Sociologists Publications, Third Edition, and Tehran. [In Persian]

28. Norberg-Schulz, Ch., 1974, Being, Space and Architecture, translated by Hassan Hafezi, Tehran Publishing House and Bookstore. [In Persian]

29. Marshall, F., Waldman, L., MacGregor, H., Mehta, L. and Randhawa, P. 2009, On the Edge of Sustainability: Perspectives on Peri-urban Dynamics, STEPS Working Paper 35, and Brighton: STEPS Centre.

30. Parsi, H. R., 2002, Recognition of Urban Space Content, Fine Arts, No. 11, pp. 49-41. [In Persian]

31. Papeli Yazdi, M. H., Rajabi Sanaajerdi, Hossein, 2011, Theories of the City and the Periphery, Samat Publishing, Tehran. [In Persian]

32. Rahnema, M., Zabihi, J., 2011, Analysis of the Distribution of Urban Public Facilities for Spatial Justice with Integrated Access Model in Mashhad, Geography and Development Journal, No. 23, pp. 26-5. [In Persian]

33. Sa'idi, A., 2010, Environment, Space and the development of a discussion on the necessity of integrated rural-urban development, Housing and rural environment Journal, No. 131, pp. 12-3. [In Persian]

34. Shokouidi, H., 2007, New Thoughts in Geography Philosophy (Vol. I), Ninth Edition, Gitashnasi Publications, Tehran. [In Persian]

Resilience of Vital Landuses against Earthquake Disaster in Tabriz Metropolis

Mohammad Raza Poor Mohammadi[1*], Hanyeh Yousefi Shahir[2], Karim Hoseinzadeh Dalir[3]

1. Professor of Geography and Urban Planning Tabriz University, TABRIZ, Iran
2. PhD Candidate of Geography and Urban Planning, Marand Branch, Islamic Azad University, Marand, Iran
3. Professor of Geography and Urban Planning, Marand Branch, Islamic Azad University, Marand, Iran

Received: 02 December 2017 Accepted: 15 April 2018

Extended abstract

Introduction

Nowadays, the process of urbanization is expanding and growing in all the countries of the world. Establishment of more urban districts has increased the main places for possible disasters. Tabriz Metropolis is located in an area prone to earthquake hazard and seismic natural disasters in different return periods. Thus it is required to study resilience of the vital landuses of the city. These vital landuses including water tanks and electricity transmission stations, gas stations, gas pressure reduction centers, hospitals, fire stations, airports, and terminals are necessary to rehabilitate critical circumstances and optimize service. Deficiency of the sensitive and vital sites may disrupt vital performance of the city. Thus, lack of comprehensive plans and rational decision-making models in this area may create irreversible problems.

Methodology

The present study is a descriptive-analytical survey that attempts to evaluate resilience of vital uses in Tabriz Metropolis against earthquake risk in terms of building strength, land resistance, application of regulations in construction of structures, their intelligibility, and emergency storage of fuel and water. The present study detected the effective indices influencing resilience of vital uses. The data were collected through the questionnaire distributed among 30 crisis management experts. We obtained 12 indexes of questionnaire. The collected data were analyzed by T-tests, Friedman, and Chi-square in SPSS software.

Results and discussion

According to the 12 criteria and indexes that influence resilience of vital uses in Tabriz city, the mean score and Friedman score for application and full implementation of building regulations and standards are 3.00 and 7.84; the values are 2.96 and 7.98 for strength and resistance of buildings; and for logical relationship between private vital uses and governmental vital uses they are 2.94 and 6.52, respectively. This reveals that resilience of vital uses in Tabriz city in terms of these indexes are in a relatively desirable condition.

∗ Corresponding Author: hyousefi.geo@gmail.com Tel: +989144166892

The results of Chi-square test (375, 397) revealed that there is a significant relationship (0.000) between promotion of the quality of vital uses and resilience of them against earthquake; the insurance level is equal to 99 percent. The results of t-test revealed that three idices examined in resilience of vital uses in Tabriz are not in a desirable condition and their t value is less than 3. The t value of intelligence and the index of installing earthquake forecasting tool in vital applications is is -1.25; the t value of people participation in resilience of vital uses index is 0.27; and t value for prediction of emergency fuel and water storage index is 1.56.

The ANP multi-criteria analytical method was used to make pairwise comparison of the criteria. The obtained results were examined by Super Decisions software; the accuracy of the process was ensured by controlling the compatibility coefficient of judgments. A set of calculated coefficients were presented in the form of a matrix. By combining these comments with scores of ANP model, dissimilarities among vital uses in different districts of Tabriz were estimated by 30 crisis management experts in 10 districts of Tabriz city; the data of the questionnaire were analyzed based on VIKOR model.

Conclution

By combining the findings of the ANP and VIKOR model, it can be concluded that the evaluation of resilience of vital uses in Tabriz city revealed that districts 9 and 4 are in desirable condition, districts 1 and 2 are in relatively desirable condition, district 3 in moderate condition, districts 5, 6, 7, and 10 are in relatively undesirable condition, and finally district 8 is in undesirable condition. Thus, by examining the current condition, the following suggestions are provided for resilience of vital uses in Tabriz: In districts 1 and 2, with relatively desirable resilience, building density around critical uses must be avoided. In district 3, with moderate resilience, it is recommended to maintain the current status and attempt to improve and promote the quality of vital uses and create spatial opening around these uses, and equip these applications to smart systems. In district 5, with relative undesirable condition, it is necessary to increase vital uses by focusing on correct location around open areas, prevent compression of developing areas around vital uses, and avoid creating these uses within the fault line range. In districts 6 and 7 with relatively undesirable condition there are various industrial divisions and intensive constructions, thus it is recommended to have vital uses in accordance with practical and functional activities in order to meet the needs of the areas at the time of crisis with the resilience of these uses. In district 8 as an old part of Tabriz, the resilience condition is undesirable; thus, it is necessary to attend to renovation and improvement, observe regulation and required standards, and participate in increasing the resilience of current vital uses and transferring and moving vital users with trans-regional performance to other areas. District 9 is in desirable condition and it is regarded as new developed areas of the city which is added recently to Tabriz city. Therefore, it is suggested to emphasize on the complete implementation of the approved draft plan without subsequent modifications through Article 5 of the Commission. District 10 is in relatively undesirable condition; it is suggested to balance the spatial organization of the city through the expansion and development of vital applications and avoid creation of these applications in the vicinity of the fault line. It is necessary to monitor the principles and criteria in the preparation of comprehensive urban plans in terms of resiliency, more closely. When using advanced systems, the units of the facility must consider the relevant standards, in addition, they must comply with the relevant standards in order to cut off the electricity and gas through smart grids.

Keywords: resilience, vital land use, earthquake, natural disaster, Tabriz.

References

1. Architectural and Urban Development Consultant Engineers, Role of Environment (1395) Tabriz General Design, Road and Urban Planning Office of East Azarbaijan Province.
2. Barnafar, Mehdi; Kazem (1393); Prioritization of critical, critical and important centers of Bandar Anzali city and providing defensive solutions from the viewpoint of non-operational defense; Journal of Applied Geographical Sciences, Volume 14, Number 32, Spring, Page 179- 161.
3. Buckle P. (2006) "Assessing Social Resilience" in Disaster Resilience an Integrated Approach edited by D. Paton and D. Johnston, pg 88-104, Charles C Thomas Publisher, Springfield, Illinois.
4. Buckle P., Marsh G.& Smale S.(2003) Reframing risk, hazard,disasters, & daily life:A report of research into local appreciation of risks & threats, The Australian Journal of Emergency Management 18(2) May pp: 81-87.
5. Colten, C. E. et al. (2008), Community resilience: lessons from New Orleans and Hurricane Katrina, CARRI Research Report 3, Community and Regional Resilience Initiative, pp. 1-5.
6. Cutter, S. L. et al., "A place-based model for understanding community resilience to natural disasters", Global Environmental Change, Pp.1-9.
7. Cutter, Susan L., Lindsey Barnes, Melissa Berry, Christopher Burton, Elijah Evans, Eric Tate, and Jennifer Webb(2008), Community and Regional Resilience: Perspectives from Hazards, Disasters, and Emergency Management, CARRI Research Report1.
8. Dutta, V. Doi: 10.1016/j. Gloenvcha, 2008. 07. 013, 2008.
9. Farzad Behtash (2012), Considering Social and Cultural Dimensionof Resilient Cities, International Disaster and Risk Conference, IDRC, Davos Swiss.
10. Farzad Behtash, Mohammad Reza (2012) Explaining the Social and Cultural Dimensions of Resilience of Tabriz City, PhD thesis, Islamic Art University of Tabriz.
11. Farzad Behtash, Mohammad Reza; Kaynezhad, Mohammad Ali; Pierre Babaei; Mohammad Taghi and Asgari Ali (1392) Evaluation and Analysis of Dimensions and Components of Resilience of Metropolis of Tabriz, Journal of Fine Arts, Architecture and Urban Development, Vol. 18, No. 3, Autumn 1392, pp. 422-33.
12. Godschalk, D., (2007) Urban Hazard Mitigation: Creating Resilient Cities, Natural Hazards Review, Vol. 4, No. 3, PP. 136–143.
13. Holling, C. S., (1973) Resilience and Stability of Ecological Systems, Annual Review of Ecology and Systematics, Vol. 1, No. 4, PP. 1–23.
14. Hosseinzadeh Delir, Karim; Maleki, Kiumars; Shahatiy, Wish; Heydarifar; Mohammad Raouf (2012); Passive Defense and Sustainable Urban Development with Emphasis on Threatful Use of Tabriz Metropolis from the Perspective of War; Journal of Geography and Environmental Sustainability, No. 5, Page 24 -1.
15. Jha, K, Miner, w. Geddes, S. (2012), Building urban resilience: principles, tools, and practice, The world Bank, pp.155.
16. Jingzhu, Wei (2008) , The Multiple Attributed Decision-Making VIKOR Method and Its Application, Journal of Yantai University.Natural Science & Engineering
17. Karrholm, M, Nylund, K, Fuente, p. (2014), Spatial resilience and urban planning: Addressing the interdependence of urban retail areas, Cities, Volume 36, 36, 121-130
18. Leon, J., March, A. (2014), Urban morphology as a tool for supporting tsunami rapid resilience: A case study of Talcahuano, Chile, Habitaa International, Volume 43, July 2014, Pages 250-262.
19. Maleki, Kiumars (2012) Evaluation of Vulnerability Analysis of Sensitive Uses of Tabriz City from the Perspective of Inactive Patches with Emphasis on the Earthquake Crisis Using the GIS, the Geographical Organization of the Armed Forces Research Project.

20. Mayunga, Losephs (2007), Understanding and applying the concept of community disaster resilience: a capital- base approach. A draft working paper prepared for the summer academy for social vulnerability are resilience building. Munich, Germany.

21. Moteff John, Claudia Copeland, and John Fisher. (2002) Critical Infrastructures: What makes on Infrastructure. Report for Congress. The Library of Congress. Wishington D.C.

22. Normandin J.-M, Therrien M.-C, Tanguay G.A(2011), City strength in times of turbulence: strategic resilience indicators, Urban Affairs Association Association 41st Conference, New Orleans.

23. Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., Pfef ferbaum R. L.(2008), Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness, Am J Community Psychol, 41, 127-150.

24. Olshansky, R. B., and J. D. Kartez(1998), Managing land use to build resilience, In Cooperating with nature: confronting natural hazards with land use planning for sustainable communities, edited by R. J. Burby. Washington, D.C., Joseph Henry Press, Washington, D.C.

25. Paton, D. & D. Johnston, Disaster resilience (2006): An integrated Approach, Springfield, IL: Charles C. Thomas, pp.320

26. Pourmohammadi, Mohammad Reza, Maleki, Kyomars; Brendkam, Farhad, Shafati, Arezoo (2012) Urban planning appropriate to passive defense with emphasis on evaluation and planning of land use optimization in Sanandaj, Sepahr Geographic Journal, Volume 21, Number 83, Autumn , P. 107-97.

27. Rezaei, Mohammad Reza (2010). Explaining resilience of urban communities in order to reduce the effects of natural disasters on earthquake, Metropolitan Case Study, PhD thesis, Geography and Urban Planning, Tarbiat Modarres University.

28. Saaty T. L. (2013). Theory and Applications of the Analytic Network Process: Decision Making with Benefits, Opportunities,Costs, and Risks, RWS Publications, Pitts burgh.

29. Salehi, Ismail, Aghababaei, Mohammad Taghi, Sarameti, Hajar, Mohammad Reza, Farzad Behtash (2011) Investigating the Environmental Resilience Using the Pathology Model, Journal of Environmental Studies, thirty-seventh year, 59th fall, Pages 99-112.

30. Twigg J.(2007) Characteristics of a Disaster Resilient Community:A Guidance Note Version 1 (for Field Testing) August 2007, for the DFID, 2007.

31. UNISDR, (2010), Resilient cities: my city is getting ready ,UNISDR press, Geneva, available from http://www.unisdr.org/english/campaigns/campaign2010-2011.

32. Valadbighi, Borouddin, Pourheidari, Gholamreza (1393) Resilience of the National Crisis Crisis, Tehran, Islamic Republic of Iran Crisis Management Scientific Society.

33. Webster Dictionary.

34. Zhou, H. et al., (2009) "Resilience to natural hazards: A geographic perspective", Nat Hazards, DOI 10.1007/s11069- 009- 9407-y.

Role of Creative Tourism in Regeneration of Historical Texture (Case Study: District 12 of Tehran)

Ahmad Pourahmad[1*], Narges Ahmadifard[2]

1. Professor of Geography and Urban Planning, University of Tehran, Iran
2. Post-doc. Candidate in Geography and Urban Planning, University of Tehran, Iran

Received: 20 June 2017 Accepted: 08 June 2018

Extended abstract

Introduction

Creative tourism is a powerful approach used in many countries for regenerating historical textures of the cities. The policy of urban regeneration to meet public needs can also help identify historical structure depending on creative urban tourism. Some of the new methods that can create regeneration through tourism are development of cultural industries. Using cultural industries is a comprehensive approach to urban regeneration of historical texture depending not only on attractions but also on development of cultural industries.The need to regenerat the historic texture of Tehran and to contribute to the integrated development of this city require a different approach. It should be noted that the creative development of tourism is a set that must be integrated with this industry. It is not possible to apply attractions to the central part of Tehran, regardless of cultural industries and important factors that they influence on emergence of a creative city. Therefore, the realm of this study is well understood, and it is clear that the historical context of the 12 regions has the potential of creative tourism helping regeneration.

Methodology

The study has been conducted by descriptive andanalytical approach using explorative model that generally uses statistical descriptive techniques, statistical data processing, and data analysis.

Results and discussion

The district number 12 of Tehran municipality has the potential and actual historical, natural, social and cultural measures of tourism, in the form of natural, historic, memorial, cultural and social attractions. These attractions were analyzed according to the criteria and indicators of cultural industries. The indicators for cultural industries in the Cultural Heritage, there are 148 attractions including 4 House of Culture and 1 Culture Centers and in the art section, 4 cinemas and 3 theaters. A review of the capabilities of other cultural industry for regenerating was made through relevant specialists and models.

The results showed that index of the artistic variables with a coefficient of 0.68 is ranked the first and the advertising index of the creative service variable with a coefficient of 0.66 is ranked the second. The index of painting from the visual arts variable with a coefficient of 0.61 is ranked third. One of the most important factors and priorities for the tourism and urban experts in creative regeneration of the district 12 is to develop cultural tourism through development of cultural industries.

∗ Corresponding Author: apoura@ut.ac.ir Tel: +989122123920

Conclusion

An effective model that could contribute to the development of cultural industries was creative tourism. In creative tourism, attractions and historical spaces along with a variety of cultural elements in historical areas serve as a set of cultural industries that innovative arenas make in cultural production and consumption, areas of competition with each other, increase in the attractiveness for potential investment and improving interaction with local communities and creation of memories. Since these industries are based on innovation and flexibility, they can be a major driver for widespread and effective transformation on the economy of the region.

Keywords: regeneration, creative tourism, historical texture, District 12 of Tehran.

References

1. Alberti, Fernando G & Giusti, Jessica D (2012), Cultural heritage, tourism and regional competitiveness: The Motor Valley cluster, City, Culture and Society 3, Elsevier.
2. Behzadfar, Mostafa (2008), City Identity (A Look at the Identity of Tehran City), Tehran Publishing.
3. Bavand Consultant Engineers (2006), Detailed Design of District 12 of Tehran, Ministry of Housing and Urban Development of Tehran Municipality, First edition.
4. Hemati, Mohammad and Sobhan Asian (2008), A New Approach to Balanced Scorecard Using Topsis Fuzzy, Industrial Management Magazine, Faculty of Humanities, Islamic Azad University, Sanandaj Branch, Third Year, No. 5, pp. 35-54.
5. Howkins, J (2001), The Creative Economy: How people Make Money From Ideas. Penguin.
6. Khalil Abad, Hossein and Pourahmad, Ahmad (2006), Historical Texture Management Planning Technologies and Experiences of Cities, Research Institute of Islamic Sciences, Culture and Social Studies, Jihad University.
7. Kamrova, Seyyed Mohammad Ali (2010) Phenomenology in the context of worn-out tissues, abstracts of articles of the 2nd National Conference on the Reconstruction and Regeneration of Historical texture and worn out texture, Shiraz.
8. Karami, Taj el-Din (2011), Spatial Inequality in the Physical Expansion of the City (Case: Tehran City), Ph.D., Geography and Urban Planning, Department of Geography and Urban Planning, Faculty of Geography, Kharazmi University, Tehran.
9. Mohammadi, Mahmoud and Azimi, Maryam and others (2011), Urban public spaces, realization of social interactions in historical textures, Case study: Old Lar city, Journal of Scientific and Research of the Restoration of Historic and Cultural Works, Number 4 , Pp. 15-28.
10. Moldoveanua, Maria & Valeriu- Ioan Franca, Valeriu (2014), Urban regeneration and more opportunities for artistic expression and cultural consumption, ELSEVIER, ScienceDirect, Procedia Economics and Finance ,490 – 496, Elsevier
11. Naziani, Asghar (2007), Urban Geography of Iran, Payame Noor Publications.
12. Qala-onoi, Mahmoud and Khan-Mohammadi, Marjan (2015), urban regeneration through explanation of cultural neighborhoods for participation in the creative industries, Magazine of Paydar city , No. 1, pp. 49-77.
13. Rafiyan, Mohsen (2013), Income on Creative Regions and Cities, Municipal Journal, No. 100, pp. 12-15.
14. Shafiei, Zahed and Farokhian, Firoozeh and Mirqad, Leyla (2014), Isfahan as a creative city of handicrafts with the approach of tourism development, Journal of the Association of Geographic Sciences, No. 43, pp. 251-278.
15. Tallon, A (2010), Urban Regeneration in the UK, Routledge, London.
16. UNCTAD(2010), Creative Economy Report: A Feasible Development Option.

17. UNCTAD(2008), Creative Economy. http://www.unctad. Org/creative_economy and http://ssc.undp.org creative_economy

18. Vanista Lazarevic, Eva; Boris Koru znjak, Arch; Devetakovic, Mirjana(2016), Culture design-led regeneration as a tool used to regenerate deprivedareas. Belgrade—The Savamala quarter; reflections on an unplannedcultural zone, Energy and Buildings 115. Elsevier.

Identification of the Components Influencing Urban Poverty (Case Study: Akhmafhayeh Neighborhood of Tabriz)

Shahrivar Roustaei[1*], Akbar Asghari Zamani[1], Fatemeh Zadvali[2]

1. Associate Professor of Geography and Urban Planning, Tabriz University, Tabriz, Iran
2. PhD Candidate in Geography and Urban Planning, Tabriz University, Tabriz, Iran

Received: 27 April 2017 Accepted: 05 March 2018

Extended abstract

Introduction

Urban poverty, generally appeared with unemployed or expelled workers and poor rural immigrants, transforms social structure of spatial space in urban areas. Urban poor groups are the rural community (from immigrants to the city), as well as production poverty and reproduction in urban society (by intra-urban displacement) and it is known for its characteristics, such as high commercialization rates, higher health and environmental hazards, social rupture, crime and conflicts with the government. Urban poverty and its spatial extent are among the most challenging issues in most of cities of Iran. Given that urban poverty is increasing day by day in Tabriz metropolitan area, therefore, it is necessary to consider the poverty through scientific methods to determine the effective factors. There are many poor and very poor urban quarters in the past in the urban spaces of Tabriz, the most important of these spaces are in the southwest part of the city (Aqmaqiya sector). Aqmaqiya is one of the old sectors in the district 7 of the city, next to the Tabriz to Khosroshahr highway. This sector was one of villages in the vicinity of Tabriz city in the past and after the expansion of this city it was known as one of the Tabriz sectors. Presence of these spaces in the metropolitan city of Tabriz gives them the need to identify the factors affecting the scope of urban poverty. In this study, we have attempted to identify the factors affecting urban poverty by providing an appropriate framework for policymaking of urban managers in order to reduce the extent of urban poverty.

Methodology

Given that this investigation seeks to develop applied knowledge in identifying the components influencing the extent of urban poverty, this study is an applied research in terms of purpose and descriptive-analytical in terms of method. We have examined the households in the neighborhood of Aqmaqiya in Tabriz city, in district 7 of the municipality. This neighborhood in the past was known for the villages around the city of Tabriz. After the expansion of this city, the villages are considered as the neighborhoods of Tabriz City. To determine the sample size, we have followed the special rules of the partial least squares method as the model used in this research, so that the sample size required in the modeling of the partial least squares method is considerably smaller than the structural equation method. In this method, we have one of the newest rules for sample size selection. It suggests that the sample size should be equal to or greater than the number of structural indices with the highest number of combinations of reagents; ten times the largest number of structural paths ending up in a particular structure in the internal route model. The sample size was 362 using the Cochran formula, which was

* Corresponding Author: s.rostaei@gmail.com Tel: +989143196157

reduced to 342 using the modified Cochran formula. Given the rule of partial least square model and some of the questionnaires, we have gatheredheterogeneous and unreliable data.

Results and discussion

Based on the output of PLS algorithm, load factor and observable variables and the Cronbach's alpha are acceptable for all obvious variables. According to the available data in the research, the average of variance criteria for hidden variables is more than 0.5 and their Cronbach's alpha is higher than 0.7. Redundancy and average subscriptions, as a measure of the quality of the model, are indicative of quality of the variables. As indicated, the values of 0.67, 0.33 and 0.19 for endogenous variables are described as significant, moderate and weak in the structural path model, respectively. The results of this study indicate that the obvious variables have the highest reliability and validity of the measurement model. The determination coefficient index shows percentage of the variation of the endogenous variable. The values of 0.19, 0.33 and 0.67 are weak, moderate and significant, respectively. The coefficient of magnitude of the complementary path is significant for model. At the values of 90%, 95% and 99% are compared with minimum statistics of 1.64, 1.96 and 2.58, respectively. In this study, model GOF index was found to be 0.688 that indicates the model overall utility.

Conclusion

The results show that all of the affected components in extent of urban poverty have a positive and significant role and there is an external relationship between the components oflack of social capital, lack of psychological capital, and the physical disability. The external indicators of consumer behavior and utility are effective on the demographic index, which means that the two indicators have internal relationship with their defined variables and external relationshipwith the extent of urban poverty of the target community. The internal and external relationships between consumer behavior and utility are considered in the demographic range with their variables and they are together in the next category. The third priority is also explained by a strong correlation between the indicators of social and political exclusion and disability with the extent of physical deprivation. The existence of a strong positive relationship between the components affecting urban poverty in the study area brings to mind that the components including absence of social capital, absence of psychological capital, and consumer behaviorare a key indicator to determine the extent of urban poverty in the study area. This finding is partly consistent with the results of the study by Das et al. (2014), which considers social indicators as the greatest impact on poverty. The results of this research are consistent with the radical theory and the view of poverty, which stemmed from the state of the political economy that crystallizes in social, political, and economic relations. The adversaries of the study view are cleared by investigating the structures that create poverty to address root causes of poverty.

Keywords: urban poverty, spatial scope, Akhmafhayeh Neighborhood, Tabriz.

References

1. Alizadeh, Mohammad (2001); Investigation of urban fields policy at Zanjan city; Urban planning and Geography M.A. Thesis, Zanjan University (in Persian).
2. Arab mazar, Abbas; Hossieninejhad, Seyyed Morteza(2004); Estimation of poverty and it's severity on various Iranian employment and job groups ; Development and agriculture economy journal , 45; PP. 113-140 (in Persian).
3. Asghari zamani, Akbar; Ahadnejhad Rooshati, Mohsen; Zadvali Khajeh, Shahrokh(2015); Investigation of social inequalities development comparative pattern in Tabriz south outskirt regions during 1375-1385, Space geographical measuring magazine, Golestan University researching- scientific journal , 5th year , Serial No.15 , pp. 171-188 (in Persian) .

4. Azar, Adel, Gholamzadeh,Ghanavati, Mehdi (2012); Path – Structural modeling in management: Smart-PLS software application: Neghah-e – Danesh, Tehran (in Persian).

5. Baharoglu, Deniz and Kessides, Christine (2002), Urban poverty, a Sourcebook for Poverty Reduction Strategies, Chapter 16. http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY. 2008/1/6.

6. Bemanian, Mohammadreza; Rezaie rad, Hadi; Mansour Rezaei, Majid(2011); Evaluation of economical features in urban poverty ranges recognition by using AHP and Delphi techniques (Case study: Kashmar city)' urban management magazine, 2011 spring and summer, 9 period, journal No. ,pp. 153-166 (in Persian).

7. Dass, Mahaganapathy, S. Gill, Sarjit, Redzuan, Ma'rof, Ahmad, Nobaya (2014), Urban poverty among Indians in Malaysia: a naturalistic inquiry, Life Science Journal 2014; 11(7), http://www.lifesciencesite.com, pp: 21-26.

8. Farahani fard, Saeid (1384); Viewing to poverty and poverty alleviation in Islamic thought; Contemporary science and thought cultural institute , Tehran (in Persian).

9. Growiec, Katarzyna, Growiec, Jakub (2014), the impact of bridging and bonding social capital on individual earnings, Evidence for an inverted U, NBP Working Paper No. 175.

10. Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009), The use of partial least squares path modeling in international marketing, Advances in International Marketing, 20, 277-320.

11. Hidayah Chamhuri, Nurul, Abdul Karim, Hafazah, Hamdan, Hazlina(2012)" Conceptual Framework of Urban Poverty Reduction: A review of literature" ASIA Pacific International Conference on Environment-Behaviour Studies Mercure Le Sphinx Cairo Hotel, Giza, Egypt, 31 October 2 November 2012, pp:804-814.

12. Hoveida, Reza, Mokhtari, Hojjat-allah, Forouhar, Mohammad (2012); Relationship of psychological investment components and organizational commitment component; Behavioral and cognitive science researches, second year; 2 No., continuous (3), 1391 Autumn and Winter, PP. 43-55(in Persian).

13. Jahdi, Roghayyeh (2009), poverty and urban environment for developing world, 3rd conference and environmental speciality fair, Tehran- 1388 Mehr month, pp. 1-9 (in Persian).

14. Javaheri, Hasan; Hataminejhad, Hossien; Ziari Karamatollah; Pourahmad, Ahmad(2014), Fuzzy survey and multi dimensions poverty zoning in urban spaces (Case study: Kamiaran city); regional planning journal, 2014 spring, 4 period, 13 No. pp. 13-30 (in Persian).

15. Jitsuchon, Somchai (2001), What Is Poverty and How to Measure It? TDRI Quarterly Review, Vol. 16, No. 4, pp 7-11.

16. Khaledi , Kouhsar; Permeh , Zourar (2005); Investigation poverty position in Iran rural and urban regions (1996-2003), development and agriculture economy, 49 , pp. 57-81 (in Persian).

17. Khamachi, Behrooz (2009); My city, Tabriz; Nedaye Shams publication, Tabriz (in Persian)

18. Khodadad Kashi, Farhad; Heidari, Khalil (2009); Measuring poverty indices based on nutrition, feed function for Iranian households, 9th year, 3 No., 1388 autumn, economical researches, pp. 205-231 (in Persian).

19. Khosravinejhad, Aliakbar(2012); Estimation of poverty and it's indices at rural and urban regions; economical modeling research-scientific journal, 6 period, No.18, 2012 Summer, PP. 39-60 (in Persian).

20. Liu, Y., Wu, F(2006), Urban Poverty Neighborhoods: Typology and Spatial Concentration under China's Market Transition, a Case Study of Nanjing, Geoforum, Vol. 37, No. 4, PP. 610-626.

21. Majidi Khameneh, Batool , Mohammadi, Alireza (2005); Introduction to urban poverty measuring and recognition, Geography (Iran Geography association researching- scientific journal) New period, 3rd year, 6&7 No. , 1384 Autumn & Winter (in Persian).

22. Mansoor Rezaee, Majid, Esmaeily, Shabnam (2010), Transformation of Public Space Leads to Transformation of Neighborhood Identity, 14th IPHS Conference, Istanbul, Turky.

23. Mirzakhani, Mohammad (1995), Investigation of rural poverty survey in Iran rural society; Theoretical economy M.A. Thesis; Imam Sadegh (Peace be upon him) University, Tehran (in Persian).

24. Najafi, B. and Shooshtarian, A. (2006). Determinants of Poverty for Rural and Urban Households in Iran. 13th Annual Conference Economic Research Forum. Kuwait, 16-18 December.

25. Odekon, M. (2010), Encyclopedia of World Poverty, Thousand Oaks, New York.

26. Piran, Parviz(2002), investigation informal residence, Case study: Shirabad – Zahedan, Haftshahr magazine 3rd year , 9&10 No. pp. 7-24 (in Persian)

27. Raees Dana, Fariborz; Madani, Saeed; Piran, Parviz; Shaditalab, Jhaleh (2000); Poverty in Iran (Articles complex), Tehran; rehabilitation and welfare University, PP. 116-139 (in Persian).

28. Rezaei, Mohammadreza; Alian, Mehdi; Khavarian, Amirreza(2014); Recognition and evaluation of urban poverty space ranges at Yazd city; Humanity gheographical researches, 3 period, No. 46; 2014 Autumn, PP. 677-695 (in Persian).

29. Roustaie, Shahrivar; Ahadnejhad, Mohsen; Asghari zamani, Akbar; Zanganeh, Alireza (2012); Comparative pattern of poverty development at Kermanshah city during 1996-2006; regional and urban researches and studies, 3rd year , 12th No., 2012 spring, PP. 17-40 (in Persian).

30. Roustaie, Shahrivar; Ahadnejhad, Mohsen; Asghari zamani, Akbar; Zanganeh, Alireza (2012); Investigation of housing framework and social indices for determining poverty residence blocks by using analysis factor model (Case study: Kermanshah city), Humanity gheographical researches, 81 No. , 2012 Autumn,(in Persian).

31. Roustaie, Shahrivar; Ahadnejhad, Mohsen; Asghari zamani, Akbar; Zanganeh, Alireza(2015); Urban poverty evaluation in Kermanshah informal sectors by using analysis factor model (Case study: Dolatabad, Shaterabad sectors, 2006) Gheography and planning researching- scientific journal, 19th year, 53 No. 1394 Autumn ,PP 137-166 (in Persian).

32. Roustaie, Shahrivar; Karimzadeh, Hossien; Zadvali, Fatemeh(2015); sex poverty transmittance space analysis in Tabriz urban spaces; Urban and regional researches, 7th year, 26 No., 2015 autumn, PP 43-64 (in Persian).

33. Samet, Sara; Salehi, Mohammadjavad(2016); Capability poverty survey in urban development guideline studies; The first urban economical and international conference (by resistant economy , action and implementation), Ordibehesht 35 , PP. 1001-1010 (in Persian).

34. Sarrafi, Mozaffar (2008); Organizing of country informal residence an frame of best city guidance; Haftshahr publication/ 23 No./ 87 Winter, PP. 4-14 (in Persian).

35. Simler, K., Harrower, S., Massigarela, C.(2003) Estimating Poverty Indices Form SimpleIndicators Surveys.

36. Taherizadeh, Kiatoon (2015); Investigation of providing chain agility on organization profitability; Administration management M.A. Thesis by guidance of Dr. Mohammad Khodabakhshi; Management and accounting college; Shahid Beheshti University (in Persian).

37. Translation and description Hekmat328. Nahjolbalagheh, The task of the rich to the poor.

38. Webster, Chris, Wu, Fulong, Zhang, Fangzhu, Sarkar, Chinmony (2016), Informality, property rights, and poverty in China's ''favelas" World Development Vol. 78, pp. 461–476, 2016. (http:// creativecommons.org/licenses/by/4.0/).

39. Westaway, M.(2006) A Longitudinal Investigation of Satisfaction with Personal and Zadvali, Fatemeh (2014); Poverty development changes measuring in Tabriz urban spaces during 1996-2006; M.A. Thesis, Planning and Geography University, by supervising of Dr. Sharivar Roustaie (in Persian).

40. Zainal, N. R., Gurmit, K., Nor Aisah A. & Jamaliah M. Kh.(2012) Housing Conditions and Quality of Life of the Urban Poor in Malaysia, Procedia, Social and Behavioral Sciences, Vol. 15, No. 50, PP. 827 – 838.

41. Zanganeh, Alireza (2010); Urban poverty development space pattern recognition by using Geographical information system (GIS) at Kermanshah city during 1996-2006 years, Zanjan University (in Persian).

42. Zibaie, Mansour; Shirvanian, abd-ol-Rasoul (2009); Investigation of macro economy variable effects on urban and rural poverty rate in Iran; Agriculture economy / 3rd volume / 2 No./PP 15-36 (in Persian).

Assessment of Citizen's Satisfaction about the Quality of Residential Environment (Case Study: Zarghan City)

Saeed Reza Akbarian Ronizi*

Associate Professor of Geography, Faculty of Humanities, Shiraz University, Iran

Received: 22 February 2018 Accepted: 06 May 2018

Extended abstract

Introduction

Residential satisfaction is one of the main topics in which the urban researchers are interested. Residents' assessment of the quality of their residential environment is effective in measuring the achievement of the goals and the success of the urban projects. According to the 2016 statistics, more than 54 percent of the world's population lives in cities. The urban residential environment has become the main habitat for the people around the world. According to the country's census in 2016, over 59 million people live in cities. With respect to the increasing urbanization and the high rate of changes in urban texture due to various reasons, the quality of residential environment in urban areas has been severely reduced. Therefore, in order to continue the urban life by satisfying the minimum human needs, it is necessary to pay attention to the urban environment quality and the citizens' satisfaction from the quality of their habitat. Therefore, as the small towns have their own specific features and environments; it is important to evaluate the quality of these environments to reflect in the degree of satisfaction. The purpose of this present study is to assess the quality of residential environment in Zarghan, Shiraz County. We try to answer the following two questions: A) what is the degree of the satisfaction from residential environment quality in Zarghan? B) Which indices of satisfaction from the residential environment quality have the greatest effect on the citizens' willingness to reside in this town in the future? It is noteworthy that the theoretical approaches to the residential environment quality can be divided into the following categories of A) The physical design and B) social-spatial approaches including human ecology, quality of life, social and interactive indices, and assessment of the degree of residential satisfaction. According to the objectives of the approach, the degree of satisfaction has been selected as the theoretical approach in this study.

Methodology

This research is practical in scope and is descriptive and analytical in method. To collect the required data, two methods of library and survey methods were applied. The statistical population of this research is the households living in Zarghan. The sample size of the study was 120 people who were randomly selected and completed the questionnaire. The unit of research analysis was the households residing in the city in the time period of the year 2018. The validity of the questionnaire was evaluated based on the opinions of the urban planning specialists and its reliability was examined and confirmed by Cronbach's alpha test. Descriptive and inferential statistics (one-sample t-test, one-way ANOVA, correlation coefficient and

* Email: akbarian@shirazu.ac.ir Tel: +989125854245

regression method) were used to process the data. Zarghan is located at an altitude of 1600 meters above the sea level, about 30 kilometers to Shiraz in northeast part and on the southern slope of Zarghan Mountain.

Results and discussion

The analysis of the individual characteristics of the respondents indicated that 62.5% of the participants were male and 37.5% were female with an average age of 37.23 years old and the average duration of their residence in Zarghan was 29.5 years. In terms of education, the majority of respondents (31.7%) had undergraduate education; and in terms of occupational situation, most of them (35.8%) were active in the service sector of economy. An investigation on the respondents' views about the their satisfaction of residence in this city showed that 16.7% of the respondents had very low and low satisfaction, 30.8% were almost satisfied, and 52.5% of them were very satisfied and highly satisfied. In relation to the desire to stay there in the future, the results indicated that 20% of the opinions showed very low and low willingness, while 33.3% of the people were almost willing to reside in this city and 46.6% were highly willing to reside. In terms of satisfaction with the quality of the residential environment, the findings showed that in all the five indices, the degree of satisfaction was above the average level. In this regard, the study of the calculated significance level showed that apart from the index of residential unit, the significance level was less than 0.05. The results of ANOVA test indicated that there was a significant difference between the indices of satisfaction about the residential environment. The findings indicated that there was a significant relationship between each of the 5 studied indices.

Conclusion

Urban development requires attention of experts and planners to different indices. Satisfaction with the residential environment quality is one of these indices which play a significant role in the process of urban planning and development. Citizens' satisfaction with their residential environment quality results in their willingness to reside as well as participate in urban development plans and projects. This research has assessed the people’s satisfaction from the residential environment quality of Zarghan. According to the results of one-sample t-test, satisfaction of the residential environment quality in Zarghan was higher than average. The results of ANOVA showed that among the indices of the study, the index of public services and the index of social characteristics of the environment have the highest score. Finally, the results of the regression method revealed that among the indices of satisfaction of the residential environment quality, the social characteristics of the environment and accessibility had the highest influence on the willingness to future residence in the city. According to these interpretations and the obtained results, it is suggested that it is necessary to improve the degree of satisfaction of the the quality of residential environment in Zarghan.

Keywords: urban development, residential environment, satisfaction, Zarghan.

References

1. Abbaszadeh, Sh., Gohari, F., and Askari Rabori, A. (2017). Analysis of Environmental Quality towards Satisfaction of Users in Mashhad Housing Complexes,Geography and urban Planning Research, Vol 4, No4, pp 653-671.
2. Allahyari asli ardeh, SH., Jafari Mehrabadi, M., and Shokrgozar, A. (2017). Assessment of Residential Environment quality in Urban Neighborhoods (Case Study: Neighborhoods of Khorramshahr and Ziabari of Rasht), Geography and urban Planning Research, Vol 5, No1, pp107-127.

3. Barati, N., and Kakavand, E. (2013). Comparative Evaluation of the Environmental Quality of Residential Place with an Emphasis on Citizens' Image (Case Study: Qazvin City), HONAR-HA-YE-ZIBA, Vol 13, No 3, pp 25-32.
4. Barati, N., and Soleiman Negad, M. (2011). Perception of Stimuli in a Controlled Environment and the Impact of Gender; Journal of Garden Landscape, Issue. 17, pp.19-30.
5. Meshkini, A., Moazzen, S., and Norouz, M. (2015). Measuring the Quality of Urban Environment in Small Cities in East Azerbaijan Province, Biannual Journal of Urban Ecology Researches, Vol 6,No 12, pp 17-32.
6. Pourahmad, A., Farhudy, R., Habibi, K., and Keshavarz, M. (2011). Analysis the Role of Residential Environment Quality in Spatial Movement of Intra-urban Population, (Case Study: The Old Texture of Khorramabad), Human Geography Research, Vol 43, No75, pp 17-36.
7. Rafieian, M., and Moloudi, J. (2010). Approaches and methods of urban residential environment quality assessment, Publication Azarakhsh.
8. Rafieian, M., Asgari, Al., and Asgarizadeh, Z. (2009). Citizen Satisfaction Evaluation of Urban Residential Environment, Environmental Sciences, Vol 7, No 1, pp 57-68.
9. Rafieian, M., Asgarizadeh, Z., and Amin Salehi, F. (2015). Comparative Analysis and Quality Assessment of Urban Residential Environment in Navab and Ekbatan Neighborhoods Using HMR and EFA Methods, Journal of Environmental Science and Technology ,Vol16, No 1, pp 247-260.
10. Rafieian,M. Masoudi Rad, M. Rezaiee,M., and Masoudi Rad,M. (2014).The Evaluation of inhabitants' Satisfaction about the Residential Quality of the Mehr Housing, Case Study: Zahedan City, Geography and Territorial Spatial Arrangement, Vol 4, No12, 135-150.
11. Rahnamaei, M.T., and Shah Hosseyni, P.(2008). Process of Urban Planning in Iran, Publication SAMT.
12. Rashno, M., and Saeidi Rezvani, N. (2012). Study of the residential environment quality in Residential Communities Case study: Milad Qazvin, city & landscape, Vol3, No 20, pp13-22.
13. Zarrabi, A., Alizadeh, J., ranjbarnia, B., Kamelifar, M.J., and Ahmadian, M. (2015). Evaluation the Rate of Citizen Satisfaction from the Quality of Urban Environment (Case study: 10 Zones of Tabriz City), Journal of Geography and planning, Vol 19, No51, pp 193-219.
14. Amole, D. (2009). Residential satisfaction in students' housing. Journal of Environmental Psychology, 29(1), 76-85.
15. Aulia, D. N., & Ismail, A. M. (2013). Residential satisfaction of middle income population: Medan city. Procedia-Social and Behavioral Sciences, 105, 674-683.
16. Bonaiuto, M. (2004). Residential satisfaction and perceived urban quality. Encyclopedia of applied psychology, 3, 267-272.
17. Bonaiuto, M., Fornara, F., & Bonnes, M. (2003). Indexes of perceived residential environment quality and neighbourhood attachment in urban environments: a confirmation study on the city of Rome. Landscape and urban planning, 65(1), 41-52.
18. Cao, X. J., & Wang, D. (2016). Environmental correlates of residential satisfaction: An exploration of mismatched neighborhood characteristics in the Twin Cities. Landscape and Urban Planning, 150, 26-35.
19. Fernández-Portero, C., Alarcón, D., & Padura, Á. B. (2017). Dwelling conditions and life satisfaction of older people through residential satisfaction. Journal of Environmental Psychology, 49, 1-7.
20. Galster, G. C., & Hesser, G. W. (1981). Residential satisfaction: Compositional and contextual correlates. Environment and behavior, 13(6), 735-758.
21. Huang, Z., Du, X., & Yu, X. (2015). Home ownership and residential satisfaction: Evidence from Hangzhou, China. Habitat International, 49, 74-83.

22. Ibem, E. O., & Aduwo, E. B. (2013). Assessment of residential satisfaction in public housing in Ogun State, Nigeria. Habitat International, 40, 163-175.

23. Ismail, F., Jabar, I. L., Janipha, N. A. I., & Razali, R. (2015). Measuring the Quality of Life in Low Cost Residential Environment. Procedia-Social and Behavioral Sciences, 168, 270-279.

24. Jansen, S. J. T. (2014). The impact of the have–want discrepancy on residential satisfaction. Journal of Environmental Psychology, 40, 26-38.

25. Lin, S., & Li, Z. (2017). Residential satisfaction of migrants in Wenzhou, an 'ordinary city'of China. Habitat International, 66, 76-85.

26. Mohit, M. A., Ibrahim, M., & Rashid, Y. R. (2010). Assessment of residential satisfaction in newly designed public low-cost housing in Kuala Lumpur, Malaysia. Habitat international, 34(1), 18-27.

27. Shieh, E., Sharifi, A., & Rafieian, M. (2011). Identification of factors that assure quality of residential environments, using environmental assessment indices: a comparative study of Two of Tehran's neighborhoods (Zafaranieh &Khaniabad). Iran University of Science & Technology, 21(2), 119-132.

28. Tu, K. J., & Lin, L. T. (2008). Evaluative structure of perceived residential environment quality in high-density and mixed-use urban settings: An exploratory study on Taipei City. Landscape and Urban Planning, 87(3), 157-171.

Changes in Urban Spatial Structure in Lahijan, Iran, Using Landscape Ecological Concepts and Metrics

Minoo Mohamadijoo[1*], Mehrdad Khanmohamadi[2], Seyyed Mahmood Hashemi[2]

1. MA in Environment, Department of Environment, Faculty of Natural Resources, University of Guilan, Sowmeeh Sara, Iran
2. Assiatant Professor, Department of Environment, Faculty of Natural Resources, University of Guilan, Sowmeeh Sara, Iran

Received: 02 February 2018 Accepted: 06 May 2018

Extended abstract

Introduction

Earth's landscape is continously changing due to natural and human factors. Changes of cities and urban sprawl become faster because of human intensive modification of environment in favor of economic land uses for utilization of society. Urban sprawl is the most important socioeconomic and spatial phenomenon that makes environmental changes faster and widespread. Landscape and land uses are changing rapidly due to driving forces of urbanization and population growth. Analyses of the composition of land-uses in a natural environment and understanding how they may change over time and space are central for planning. Analysis of spatial and temporal variations of landscapes is linked to prediction of future development of the city and its control is one of the main concerns of environmental managers and planners. For this purpose, remote sensing techniques and geographic information systems are essential tools to assess urban landscape to determine the changes in urban development. Remote sensing technology is the best tool for monitoring environmental changes and rapidly extraction of land uses. Landscape is a mosaic, tens of kilometers wide in which local ecosystems and land uses are repeated and as a matter of fact it is the nature and general characteristics of an area. Landscape metrics are a suitable tool for quantitative characterization of spatial patterns. Quantitative measures can be obtained by assessing the landscape metrics, which illustrate the quantitative changes of the current state of the landscape. The purpose of this study is to investigate spatio-temporal variations in Lahijan city to evaluate the process of structural changes in urban land use and the landscape principles and metrics.

Methodology

To achieve this goal, Landsat images of ETM+ and OLI in the years 2000 and 2016 were used to prepare land use maps at first and the study area were separated in ENVI 5.1. The classification has been done through maximum likelihood algorithm in this software, by one of the methods of supervised classification. For monitoring the change detection of land use in this period, the produced maps of 2000 and 2016 were compared in IDRISI SELVA software. The land cover changes map of the period from 2000 to 2016 were created using CROSSTAB algorithm. The rate of land use change during this period was calculated. Converting the rate of a land use change to another and the area of each land use was calculated separately. Finally,

[*] Corresponding Author: minoo_mohammadijoo@yahoo.com Tel: +989372295735

using landscape ecology metrics approach the following metrics were calculated in two levels of class and landscape; these metrics are including Class area, Number of Patches, Largest Patch Index, Landscape Shape Index, Total Edge, Eudidean Nearest Neighbor Distance, Patch Area Mean, Perimeter-Area Fractal Dimension, Contagion, Shannon Diversity Index. Spatial pattern was determined with Fragstats 4.4 software to extract landscape metrics in two levels of class and landscape. This software includes a complete series of landscape metrics that are suitable for spatial pattern analysis.

Results and discussion

The results revealed that the matrix area is agriculture and also the trend of changes shows that the area of agricultural land use has increased. This means increases in semi-natural land use. The number and the total edge of the agriculture patches have decreased; this means more aggregation and compactness of these patches. Increase in the Largest Patch Index and Patch Area Mean shows that agriculture land use became more integrated. Increases in the Eudidean Nearest Neighbor Distance indicated that distance between agriculture patch has increased. The Perimeter-Area Fractal Dimension of agricultural land use has augmented slightly and, therefore, its complexity has increased.

Increases in the area and the number of urban developed patch showed a fragmentation in the urban built class and creation of new man-made areas. The shapes of urban built patch were increased and, therefore, it was disaggregated and total edge was increased and this land use was disconnected. The Largest Patch showed belongs to urban class. Reducing Eudidean Nearest Neighbor Distance of urban patches leads to an increase in aggregation and slight decrease in Mean Patch Area. The Perimeter Area Fractal Dimension for urban built class was increased and its complexity has also increased. The area and the number of greenery land patches were decreased, and also landscape Shape Index was decreased. This led to green cover class to become more aggregated and compact. Decrease in the values of Total Edge, Largest Patch Index and Patch Area Mean for green cover class indicated a destruction in natural and forest areas. Decreases in the metric of Perimeter Area Fractal Dimension of green cover resulted in decreasing its complexity. Increases in Eudidean Nearest Neighbor Distance of green cover led to isolation of these patches and, therefore, decreases in ecological connections between them. Examining the metrics on the landscape level revealed that the complexity of the landscape of the region became simple and the diversity of the landscape pattern is decreased. The results of monitoring the changes between 2000 and 2016 indicated that the dominant land use changes belong to conversion of natural land cover class into agricultural land use. In the later stage, all types of land uses tend to be converted into urban construction class. Increase in urban constructions means increase in man-made patterns and more influences on natural areas.

Conclusion

In this paper we evaluated the dynamics of urban land-uses and the changes as one of the biggest human impacts on the terrestrial environment. Understanding this change in the spatial configuration of urban areas and urban growth over time will be important for decreasing the impacts of urban growth. The results of this research showed that to prevent destruction process of forest cover by increasing the unplanned urban development, it is essential to prepare development plans for resource management to achieve sustainable development. It seems that if this process is continued in the future, it can destroy green areas. If appropriate and professional policies are not made, all of patches are changed into urban built areas and even this city may be linked to another city. It was suggested that we should use predicting models to determined future developments and make decisions based on sustainable development goals to prevent unsuitable development.

Keywords: landscape ecology, metrics, remote sensing, land cover, urban built.

References

1. Arekhi, S, 2015, Application of landscape metrics in assessing the process of land use change using remote sensing and GIS, Journal of Geography and Development, No. 40,pp 59-68
2. Aguilera, F., Valenzuela, LM., Botequilha-Leitão, A., 2011, " Landscape metrics in the analysis of urban land use patterns:A case study in a Spanish metropolitan area, Landscape and Urban Planning 99 , 226–238
3. Burel, F. ,& Baudry, J., 2003, Landscape Ecology Concepts, Methods And Application. Science Publishers. INS:USA.
4. Deng, J. S., K. Wang, Y. Hong and J. G. Qi., 2009, Spatio-temporal dynamics and evolution of land use change and landscape pattern in response to rapid urbanization, Journal of Landscape and Urban Planning, No 92 ,pp 187–198
5. Dramestad, W.E.; Olson, J.D. & Forman, R.T.T, 2007, Landscape ecology principles in land- use planning, Translated by Azeri Dehkordi, Tehran, Ettehad press, Adabestan.
6. Eslahe Arabani,E., 2008, Guilan Book, Iran Pezhown Group Press.
7. Forman, R.,& Godron, M., 1986, Landscape Ecology. USA: John Willy & Sons, New York.
8. Hashemi, SM, Yavari, A., Jafari ,H, 2015, Survey of Spatial-temporal of environmental quality in the foothill Ecotones of central plateau of Iran with the application of ecological land use metrics, Journal of Environmental Studies, Volume 41, No 1, pp. 201-218.
9. Karami, A., Feghhi, j., 2012, Survey of quantization of landscape metrics in the conservation of sustainable land use patterns (case study: Kohgiluyeh and Boyerahmad provinces), Journal of Environmental Studies, No 60 pp79-88
10. Kiyani, v., Feghhi, j., 2015, Survey of Landform structure/land use of Sefidrood river area using by Landscape Ecology Metrics, Journal of Environmental Sciences and Technology, Volume 17,No 65, p131-141.
11. Kiyani, v, 2014, An Introduction to the landscape Ecology, Dignagar press.
12. Lausch, A., Herzog F., 2002, Applicability of landscape metrics for the monitoring of landscape change: issues of scale, resolution and interpretability. *Ecological indicators* 2(1): 3-15.
13. Liding, C., Yang, L., Yihe, L., Xiaoming, F., Bojie, F., 2008, Pattern analysis in landscape ecology: progress,challenges and outlook.ACTA ECOLOGICA SINICA, 5521-5531
14. Luck, M., Wu, J., 2002, A gradient analysis of urban landscape pattern: a case study from the Phoenix metropolitan region of USA, Landsc. Ecol. 17, 327–339.
15. Makhdoum, M, DarvishSefat, A, Jafarzadeh, H, Makhdoum, A, 2013, "Environmental Evaluation and Planning by Geographic Information system", University of Tehran Press.
16. Matsushita,B.,Xu,M.,Fukushima,T., 2006, Characterizing the Changes in landscape structure in the Lake Kasumigaura Basin, Japan using a high quality GIS dataset.Journal of Landscape and Urban Planning,78(3):241-250.
17. McGarigal, K., Cushman, S.A., Neel, M.C., Ene, E., 2002, FRAGSTAT: Spatial Pattern Analysis Programfor CategoricalMaps, Accessible
18. Mirzayi, M, Riahi Bakhtiari, A, Mahini, A, Gholamali Fard , M, 2013, Survey of Land cover changes in Mazandaran province by using landscape ecology Metrices between 1984-2010, Journal of Applied Ecology, second year, Issue 4,pp.37-54
19. Moradi, A., Teimouri, H., Dejkam, s., 2015, Monitoring Physical Changes in the Landscape of Karaj City Using by Synoptic Analysis and Satellite Images, Journal of Spatial Planning and Design, Vol. 19, No. 1. Pp.127-146.
20. Naveh, Z., Lieberman, A. S., 1984, Landscape ecology, Theory and application, Springer Science & Business Media.

21. Noahegar, A., Jabbarian Amiri, B., Afrakhteh, R, 2015, Analysis of Land use in the central part of Guilan By landscape ecology approach, Journal of geography and urban-regional Land use planning, No. 15, Pp.197-214

22. Pooya naghsh Shahr and Bana Consulting Engineers, 2009, Lahijan Comprehensive Plan, Housing Foundation of Islamic Revolution.

23. Salajegh, B., Monavvary, S M., Karbasi, A., Khorasani, N., Shariat, S M., 2014, Analysis of Land Destruction using by change detection and landscape metrics (Case study: Kish Island), Environmental Research Special Issue .

24. Seto, K.C. and Fragkias, M., 2005, Quantifying spatiotemporal patterns of urban land-use change in four cities of China with timer series landscape metrics. Landscape Ecology, 20, 871–888.

25. Soffianian, A, Mokhtari, Z, Khajeeddin, S J, Ziaei, H 2013, Analysis Gradient of the Pattern of Urban Landscape ecology (Case Study: Isfahan City), Journal of Human Geographic Research - Vol 45, No. 1.pp. 87-104

26. Sun, ch., wu,z., lv,zh., yao,n., wei, j, 2013, Quantifying different types of urban growth and the change dynamic in Guangzhou using multi-temporal remote sensing data, International Journal of Applied Earth Observation and Geoinformation, No21, pp 409-411

27. Wang,X ; Zheng,D and Shenand, Y, 2008, use change and its driving forces on the Tibetan Plateau during 1990–2000, Journal of CATENA79, p56-66.

28. Weng, Y. 2007. Spatiotemporal changes of landscape pattern in response to urbanization, Landscape and Urban Planning 81-341–353

Structural Equation Modeling of the Dimensions of Place with a Cross-cultural Approach (Case study: Isfahan Naghsh-e-Jahan Square)

Behnaz Babaei Morad[1], Hossein Zabihi[2*], Hamid Majedi[3]

1. PhD Candidate, Department of Urban Planning, Science and Research Branch, Islamic Azad University, Tehran, Iran
2. Associate Professor, Department of Urban Planning, Science and Research Branch, Islamic Azad University, Tehran, Iran
3. Professor, Department of Urban Planning, Science and Research Branch, Islamic Azad University, Tehran, Iran

Received: 23 Jenuary 2018 Accepted: 06 May 2018

Extended abstract

Introduction

The issues of place and culture can be studied within the context of human and social geography. The cultural characteristics of society (like a soul) manifest and influence the body of "place". The city as a substrate is a cultural-physical collection formed by the needs, activities and behaviors of inhabitants. The most desirable structure of a good city should facilitate the connection between different cultures. The aim of this research is to make structural model of place dimensions in Isfahan Naghsh-e-Jahan Square with cross-cultural approach. The necessity of conducting this research is to investigate several main categories which include place, cross-cultural dimensions and the position of Naghsh-e-Jahan Square. In the category of place, the attention is focused on empirical, behavioral and practical dimensions of place in urban areas with emphasis on Iranian context and its features; in the category of cross-cultural dimension, the attention is focused on the explanation of multi-dimensional look at spatial and space categories; and in the category of Naghsh-e-Jahan Square, the attention is focused on the importance of surveying to identify the capacities of cultural/historical places for international exploitation and cultural-social and economic strategies.

Methodology

This study has been designed in survey method, with the aim of structural relation modeling between place variables with cross-cultural approach. The model and hypothetical relationships were tested by the information gathered from visitors of Isfahan Naghsh-e-Jahan Square in nowruz holidays. In selecting people for interview; we tried to consider different characteristics such as gender, age and education. The selection of samples was done systematically and the interviews were conducted with passengers and visitors in four sides of the square and during two morning and afternoon shifts. We gathered information via researcher made questionnaire. All questions were asked on a scale of 5 options. In this study, statistical population is all the people with the age of more than 18 years old in Naghsh-e-Jahan Square and in the period of data collection. Cronbach's alpha coefficients and factor loadings derived from confirmatory factor analysis indicate the appropriate validity and reliability of research tools. Structural equation modeling (SEM) was used to test the research hypotheses. This model includes two

* Corresponding Author: h.zabihi@srbiau.ac.ir Tel: +989121937520

parts: measurement model and structural model. In order to assess the goodness of fit of the model, various fit tests such as NFI, PGFI, GFI, RMSEA, Chi-Square and PNFI have been used; the figures of all indicators show the goodness of fit of the model.

Results and discussion

The study of statistical distribution of four dimensional locations with cross-cultural approach indicates the criterion of power-attractive capacity with the average of 51.07 and standard deviation of 7.07 as the best situation among all criteria. This criterion was considered by respondents as a very favorable. Other criteria with favorable average values and higher indicate that Naghsh-e-Jahan Square with special location characteristics and cross-cultural approach can be considered as a favorable place. The results of correlation tests indicate that all place dimensions with cross-cultural approach have positive and meaningful relationships with each other. This shows that in terms of semantics, the quadruple dimensions of place model with cross-cultural approach have a relatively good relationship with each other; they can interact with each other in a common conceptual space. Using confirmatory factor analysis, test of the first hypothesis indicated that a place with cross-cultural approach of the raised quadruple dimensions is combined with the theoretical model of the research and the criteria of the goodness of fit based on appropriateness of confirmatory factor analysis model with research observations. The second hypothesis of this research indicates causality relationship between the factors of power persistence capacity and power- interactive and evolutionary capacity; the standardized path coefficients associated with this path express the positive and significant impact of the factor of power-persistence capacity on power-interactive and evolutionary capacity. The third hypothesis of this research indicates causality relationship between the factors of power- persistence capacity and power-event capacity; the standardized path coefficients associated with this path express the positive and significant impact of the factor of power-persistence capacity on power-event capacity. The fourth hypothesis of this research indicates causality relationship between the factors of power- attractive capacity and power-event capacity; the standardized path coefficients associated with this path express the positive and significant impact of the factor of power-attractive capacity on power-event capacity. The fifth hypothesis of this research indicates causality relationship between the factors of power-interactive and evolutionary capacity and power- event capacity. The standardized path coefficients associated with this path express the positive and significant impacts of the factor of power-interactive and evolutionary capacity on power-event capacity. All goodness of fit indicators on the structural part of the model is as acceptable as the measurement model.

Conclusion

The place approach of this research is a new approach that has not been investigated directly. Therefore, the present research can be regarded as an innovative and creative perspective on the concept of place. This study indicates that the place with cross-cultural approach has a complex concept with different dimensions. In the current research, the four-dimensional model derived from the previous studies was tested in the format of the grounded theory. The findings of the present study express that in assessment of the respondents, the factor of power- persistence capacity isdeclined in score compared with other place dimensions with cross-cultural approach. This shows that special facilities should be provided for power- persistence capacity to convert Naghsh-e-Jahan Square to a place with cross-cultural approach. The findings indicate that among all factors of a place with cross-cultural approach, the respondents allocated the highest score to the factor of power-attractive capacity. Therefore, it can be concluded that if Isfahan Naghsh-e-Jahan square is considered as a place with cross-cultural approach, it is possible that the power-attractive capacity will be more useful. The findings indicate that the places with more possibility of interaction will probably provide better opportunity for conversion and also play the role as a place with cross-cultural approach.

Keywords: cross-cultural approach, dimensions of place, Isfahan Naghsh-e-Jahan Square, structural equation modeling.

References

1. AlmazAacute; N, J., Suzuki, M., Tairako, Y., Kawakubo, S., & Inoue, G. (2012). Cross-Cultural Evaluation of public space Quality. Journal of Architecture and Planning (Transactions of AIJ), 77(680), 2379-2388. http://dx.doi.org/10.3130/aija.77.2379.
2. Aminpur, Ahmad; Jabalameli, Abdolah and Khatabakhsh, Fariba (2017). A Historical Review of Naghsh-e Jahan Square's Status of Proprietorship: From Safavid era to the Islamic Revolution according to Deeds of Endowment, Honar-Ha- Ye-Ziba: Memari-va-Shahrsazi, 21(4), 87-98 (In persian).
3. Barati, Nasser (2015). Semiotic-cultural Definition of "Place" (Case Study: Persian Language), Journal of the Art and civilization of the ORIENT, 3(8), 3-10 (In persian).
4. Bigdeli, Zahed and Sharifi, Somayeh(2008). An Introduction into the Concept of place, Library and Information Science, 11(4), 239-254(In persian).
5. Cultural Heritage Organization (2008). Naghsh-e-Jahan: Eternal legacy, Media narratives of immortality of an architectural masterpiece, Ghalmro Aftab publication, first edition, Tehran(In persian).
6. Ebrahimpour, Farshid (2015). Naqsh-e Jahan Square: A masterpiece in this world, Naqsh-e Negin publication, first edition, Isfahan(In persian).
7. Ebrahimpour, Farshid (2018). Ālī Qāpū of Naqsh-e Jahan: A masterpiece in half of the world, Naqsh-e Negin publication, first edition, Isfahan(In persian).
8. Ghasemi, Vahid (2013). Structural Equation Modeling in Social Researches Using Amos Graphics, Sociologists Publication, second edition, Tehran(In persian).
9. Ghashghaee, Reza; Movahed, Khosro and Mohammadzadeh, Hojatollah (2016).Evaluation of sense of place with an emphasis on physical and environmental factors in urban coastal areas; Case study: Boushehr Town, Journal of Geography and Urban Planning Research, 4(2), 261-282(In persian).
10. Golkar, Koroush (2011). Creating Sustainable Place: Reflections on Urban Design Theory, Publication of Shahid Beheshti University, Tehran (In persian).
11. Habib, fereshteh(2009).The interaction between culture and urban Physical; Case Study: Esfahan-Safavid, ,Hoviat-e-shahr 3(4), 83-94.
12. Hair, J., Sarstedt, M., Ringle, C. and Mena, J. (2011). An assessment of the use of partial least squares structural equation modeling in marketing research. Journal of the Academy of Marketing Science, 40(3), pp. 414-433.
13. Haghighi, Mohsen, Nassrin; Ghaleehnoee, Mahmoud; Ghaffari, Abbas (2017). Assessing the Effective Elements of Acoustic Comfort and Soundscape Imageability of Users in the Naghsh-e-Jahan Square, Isfahan, Journal of Architecture And Urban Planning, Bi-Annual Journal of University of art, 5(19), 133-151(In persian).
14. Hosseini, Seyed Yaghoub and Abareshi, Ahmad (2012). Structural Equation Modeling, Sociologists Publication, first edition, Tehran(In persian).
15. Khastou, Maryam and Habib, Farah (2017). An Analytical Approach to the Impact of urban Physical Aspects on Culture emphasizing Urban Fabric; Case Study: City of Qazvin, Journal of Studies on Iranian-Islamic City, 7(26), 31-42(In persian).
16. Kottak, P.C.(2002). Anthropology: The Exploration of Human Diversity, McGraw-Hill Higher Education Publication, United States.
17. Mehrabani, Elena; mansouri, seyed amir and javadi, shohre (2017). Landscape Approach in Creating Vitality in Valiasr Avenue with Emphasis on Creating the Sense of Place. A Case Study

of Valiasr Avenue (The Distance between Vanak Square and Parkway Intersection), Bagh-e Nazar Quarterly Journal, 14(55), 5-16(In persian).

18. Mirgholami, morteza and ayashm, masoumeh (2016). A conceptual model to evaluate the sense of place using four factors of perceptual, physical, social and functional; the Case study of Imam Street in Urmia, Journal of urban Studies: Motaleate Shahri, 5(19),69-79(In persian).
19. Modiri, Atousa (2008). Place, Hoviat-e-shahr, 2(2), 69-79(In persian).
20. Montgomery, J. (2008). The new wealth of cities. Aldershot [u.a.]: Ashgate.
21. Naqizadeh, Mohammad(2016). Contemplations on Cultural Transactions regarding Ideas and Idioms, Case Study: Space and Place, Journal of Iranian Architecture Studies, 1(8),89-106(In persian).
22. Naqizadeh, Mohammad(2015). Identity of The City: Foundations, Components & Manifestations, Jahad Daneshgahi Publication, First Edition, Tehran(In persian).
23. Ostovar, Nima; Behzadfar, Mostafa; Zamani, bahador; Ghale noee, Mahmood (2015). Mixed method research of effective factors on temporality in urban place/ Naghsh-e-Jahan Square Isfahan, Journal of urban Studies: Motaleate Shahri, 4(16), 39-53(In persian).
24. Pakzad, Jahanshah (2010). An Intellectual History of urbanism, From space to place, Armanshahr Publication, Second Edition, Tehran(In persian).
25. Pakzad, Jahanshah (2011). Theoretical foundations and urban design process, Shahidi Publication, fifth edition, Tehran(In persian).
26. Panjtani, Monireh; Mansourian, Yazdan and Mobini, Mahtab (2017).Phenomenology of the Aesthetic Experience of place: Case Study Naqsh-e-Jahan Square, Journal of Philosophical Investigations, 11(20), 23-60(In persian).
27. Rad Ahmadi, Mina (2012). The study of the evolution and the continuity of Naghsh-e-Jahan square (Imam square) in Isfahan with emphasis on its open space, Master thesis in Environmental Graphic, Advisor professor: Tehrani, Farhad, Isfahan University of Art, June 2011(In persian).
28. Rezvani, Mohammad Reza and Ahmadi, Ali (2010). Place and role of culture in the formation of spatial identity, Journal of Culture-Communication Studies, 10(6), 45-68(In persian).
29. Shafieian Dariani, Faezeh; Pour Jafar, Mohammad Reza and Ghobadi, Alireza (2014). The Concept of Persistence in Islamic Architecture and comparing it to the Concept of Sustainability in Contemporary Architecture, Journal of Researches in Islamic Architecture, 2(4), 32-50(In persian).
30. Shahabian, Pooyan and Larimiyan; Seyedeh Farzaneh (2016). Survey on Soundscape of Valiasr Street in Tehran with Emphasis on a Human Perception, Armanshahr journal, 9(17), 237-248(In persian).
31. Shahabi Nejad, Ali; Abouie, Reza and Ghaleehnoee, Mahmood (2016).Climatic Comfort in Naqsh-e Jahan Square, Journal of Studies on Iranian-Islamic City, 7(25), 5-16(In persian).
32. Shahabi Nejad, Ali; Abouie, Reza and Ghle Nouie, Mahmood and Imami, Seyed Mohammad (2014). Formation and Historic Revolution of Isfahan s Naghsh-e-Jahan Square, Bi-Annual Electronic Journal of Restoration Science & cultural Heritage, 2(3), 45-65(In persian).
33. Shamai, S. (1991). Sense of place: an empirical measurement. Geoforum, 22(3), 347-358. http://dx.doi.org/10.1016/0016-7185(91)90017-k.
34. Shayan, Hamidreza; Einifar, Alireza and Diba, Darab (2009). Design Concepts in Alien Context Analyzing Foreign Architects' Works in Persian Gulf States from the Perspective of Regionalism, Honar-Ha- Ye-Ziba: Memari-va-Shahrsazi, 1(38), 49-60(In persian).
35. Shokouhi, Hossein (2005). New thoughts in the philosophy of geography: Environmental philosophy and geographic schools, Gitashenasi Geographical & Cartographic Institute, Tehran(In persian).
36. Sholeh, Mahsa; Lotfi, Sahand and Kian, Fariba (2017). Application of 'Place Design Quality Indicator' (PDQI) Method in the Comparative Assessment of Historic and Cultural Urban Spaces

Case Study: Two Historic-Cultural Places in Historic Urban Fabric of Shiraz, Journal of Architecture And Urban Planning, Bi-journals of the University of Art, 10(19), 31-114(In persian).

37. Steele, Fritz (1981). The Sense of Place, CBI Publishing Company, Boston.
38. Thomas, D. F. and Cross, J. E. (2006). Organization as place builders. Institute of Behavioral and Applied Management, Available at: http://www.stoveprairiegroup.com/oapd.pdf (accessed at 17th May).
39. Vahdat, Salman and karimimoshaver, Mehrdad (2016). Comparative study on the opinions of specialists and citizens to transform urban environments into social teaching spaces; Case study: Hamadan, Journal of Geography and Urban Planning Research, 4(1), 89-116(In persian).
40. Zare, Mozhgan (2011). The study of visual factors in Ali qapu mansion and its use in Environmental Graphic of Isfahan Naghsh-e-Jahan square, Master thesis in Visual Communication, Advisor professor: Ghazizadeh, Khashayar, Shahed University, August 2011(In persian).
41. Zekavat, Kamran and Sadat Dehghan, Yasaman (2017). Dimension to Develop Quality in Public Realm and a Management Model for Creation of Places, Armanshahr journal, 9(17), 215-224(In persian).

Evaluating the Potential of Urban Development Areas using Artificial Neural Network (Case Study: Kermanshah City)

Milad Bagheri[1], Mohammadreza Jelokhani-Niaraki[2*], Abdolkhalegh Charkaneh[3], Keyvan Bagheri[4]

1. Master Student in GIS and Remote Sensing, Faculty of Geography, University of Tehran, Tehran, Iran
2. Assistant Professor of GIS and Remote Sensing, Faculty of Geography, University of Tehran, Tehran, Iran
3. MA in GIS and Remote Sensing, Faculty of Geography, University of Tehran, Tehran, Iran
4. PhD Candidate in GIS and Remote Sensing, Faculty of Geography, University of Tehran, Tehran, Iran

Received: 16 November 2017 Accepted: 21 May 2018

Extended abstract

Introduction

Some of the important phenomena occurred in recent centuries in the social and economic life of different countries of the world are the emergence of numerous new cities, development of ancient cities, advances in urbanization and urban development. Urban development and changes in land use patterns lead to widespread social and environmental impacts including reduction in natural spaces, increases in vehicle accumulation, reduction in agricultural fertile lands with high production potential and degradation of water quality. Urban development in any country is not coincident with other aspects and, on the other hand, controlling future development requires careful planning. Understanding the right patterns of urban growth is needed to manage sustainable urban growth and planning for urban development. The high rates of urban population growth in Iran and the lack of urban infrastructure in one hand and the increasing trend of land use change, followed by the loss of valuable ecological landuses in urban and peri-urban areas andindustrial pollution provide the necessity of modeling for urban development.

Methodology

The data used in this research can be generally divided into two main categories: the data used to extract land uses in the study area, e.g., satellite imagery, and the data considered as effective factors on urban expansion and land use change. Identifying the variables affecting the creation of the main prerequisites for the development of land use models, we try to use independent groups of variables including socioeconomic, biophysical and land use in this study. Since there are several decision-making rules for exploiting these variables, in this study, the distance between these variables was considered as an indicator. To work with the artificial neural network, the effective parameters in urban development should be given as input to the network (INPUT), and then a number of educational points are provided to the network for using these points (TARGET) to measure the impact of each. It determines the input layers, in fact, the

* Corresponding Author: mrjelokhani@ut.ac.ir Tel: +982161113540

network has learned the necessary training to deal with new areas. After determining the number of hidden layers in the network structure, the entire study area is provided to train the network for zonnation of the potential areas of urban development. MLP network with 16 input layers (effective factors in urban development), 12 intermediate layers (test and error method), a neuron in the output layer as an outline map (final map of urban development potential), and the Leuvenberg Marquard training algorithm was executed and, thus, the network was trained with new samples.

Results and discussion

The network stopped after 44 repetitions and got the necessary training. In repetition 38, the optimal possible condition has the highest correlation and the least error. Given the 0.93 second factor, it can be ensured that network over-network learning is well prevented. Finally, the total regression coefficient of the network is resulted from the company total data network (95%). Then, the entire study area was evaluated by the network and the network based on the weight of the criteria received the training. The output from this stage was a valuable layer between zero and one.

Conclusion

It can be clearly seen that with the evolution of urban facilities and potentials, the vast majority of regions with urban development potential are located at the closest distance between these facilities and urban areas, especially the main roads of the city. The areas displayed in blue have the greatest potential for urban development. The most potential areas of urban development are located in the southwest of Kermanshah and around the main roads of Kermanshah-Islamabad and Kermanshah-Kangavar. The northern areas of the city have a low development potential due to their height and slope. The results of the study could be used to identify the areas for urban development to prevent development of irregular towns that have severe impacts on urban ecosystems and the lives of urban residents, as well as the loss of city capital. The future planning of the city of Kermanshah is relying on sustainable development with the least damage and inconsistencies in the agenda of urban managers and planners.

Keywords: urban development potential, neural network, classification, MLP.

References

1. Abidin, S. Z., Jamaluddin, M. F., & Abiden, M. Z. (2010). Introducing an intelligent computerized tool to detect and predict urban growth pattern. *WSEAS Trans. Comput,9*(6),604-613.
2. Aronov, Stan (1391), Remote Sensing for GIS Managers, Translation: Ali Asghar Darvish Sefat, Mahtab Pirbabakher, Manijeh Rajabpour Rahmati. Tehran: Tehran University Press.
3. Atkinson, P. M., & Tatnall, A. R. L. (1997). Introduction neural networks in remote sensing. *International Journal of remote sensing*, *18*(4), 699-709.
4. Batty, M. (2007). *Cities and complexity: understanding cities with cellular automata, agent-based models, and fractals*. The MIT Press.
5. Bactrian Newspaper: Creates a wounded marginal belt on the Kermanshah, written on October 20, 1396.
6. Bella, K. P., & Irwin, E. G. (2002). Spatially explicit micro-level modeling of land use change at the rural-urban interface. *Agricultural Economics*, *27*(3), 217-232.
7. Dewan, A. M., & Yamaguchi, Y. (2009). Land use and land cover change in Greater Dhaka, Bangladesh: Using remote sensing to promote sustainable urbanization. *Applied Geography*, *29*(3), 390-401.

8. Del Frate, F., Schiavon, G., & Solimini, C. (2005, March). Change detection in urban areas with QuickBird imagery and neural networks algorithms. In *III ISPRS International Symposium Remote Sensing and Data Fusion Over Urban Areas (URBAN'05)* (pp. 14-16).

9. Galdavi, S., Mohammadzadeh, M., Salmanmahiny, A., & Nejad, A. N. (2013). Urban Change Detection Using Multi-temporal Remotely Sensed Imagery (Case Study: Gorgan Area, Northern Iran). *Environment and Urbanization Asia*, *4*(2), 339-348.

10. Guan, D., Li, H., Inohae, T., Su, W., Nagaie, T., & Hokao, K. (2011). Modeling urban land use change by the integration of cellular automaton and Markov model. *Ecological Modelling*, *222*(20), 3761-3772.

11. Gomez, H., Kavzoglu, T. and Mather, P. 2002. Artificial neural network application in landslide hazard zonation in the Venezuelan Andes. *Abstracts of 15th International Conference on Geomorphology*, Tokyo, Japan, 23-28.

12. Huang, H.G., Hwang, R.C. and Hsieh, J.G. (2002). A new artificial intelligent peak power load forecaster based on non-fixed neural networks. *Electrical Power Energy Syst 24*, 245 250.

13. Jalili Ghazi Zade, M., and Noori, R. 2008. Prediction of Municipal Solid Waste Generation by Use of Artificial Neural Network: A Case Study of Mashhad. *Int. J. Environ.* Res 2 (1),13-22.

14. Javadi, y (1387). Modeling land cover changes using Cellular Automata in the environment. GIS Master's thesis, College of Engineering, Tehran University.

15. Junfeng, J. 2003. Transition Rule Elicitation for Urban Cellular Automata models Case Study: Wuhan-China, MSc. Thesis, *International Institute for Geo-Information Science and Earth Observation (ITC*). The Netherlands.

16. Kamyab, Hamid Reza; Salman Mahini, Abdolrasool; Hosseini, Seyyed Mohsen; Gholamali Fard, Mehdi. (1390). Application of Artificial Neural Network in Urban Development Modeling (Case Study: Gorgan City). Human Geography Research, 43 (2), 99-114.

17. Kamal Jain, P. (2011). A review study on urban planning and artificial intelligence. *International journal of soft computing and engineering (IJSCE)*. Volume, 1. No, 5. November. pp: 2231-2307.

18. Kiartzis, S.K., Bakirtzis, A.G. and Petridis, V. 1995. Short-term load forecasting using neural networks. *Electric Power Syst Res33*, 1 -6.

19. Lin, H., Lu, K. S., Espey, M., & Allen, J. (2005). Modeling Urban Sprawl and Land Use Change in a Coastal Area--A Neural Network Approach. In *2005 Annual meeting, July 24-27, Providence, RI* (No. 19364). American Agricultural Economics Association (New Name 2008: Agricultural and Applied Economics Association).

20. Lu, D., & Weng, Q. (2007). A survey of image classification methods and techniques for improving classification performance. *International Journal of Remote sensing*, *28*(5), 823-870.

21. Noori, R., Khakpour, A., Omidvar, B., and Farokhnia, A. (2010). Comparison of ANN and principal component analysis multivariate linear regression models for predicting the river flow based on developed discrepancy ratio statistic, *Expert Systems with Applications*37,5856-5862.

22. Noori, R., Karbassi, A., Mehdizadeh, H., Vasali-Naseh, M. and Sabahi, M.S. (2011). A Framework Development for Predicting the Longitudinal Dispersion Coefficient in Natural Streams using a Neural Network, *Environmental Progress and Sustainable Energy* 3, 439 447.

23. Pijanowski, B. C., Brown, D. G., Shellito, B. A., & Manik, G. A. (2002). Using neural networks and GIS to forecast land use changes: a land transformation model. *Computers, environment, and urban systems*, *26*(6), 553-575.

24. Pilaway, Sajjad; Parsi, Hamid Reza. (1393). Determining the optimal distribution of Kermanshah city using AHP and GIS. Urban and Regional Studies and Research (Stop Publishing), 6 (22), 127-142.

25. Pourahmad, Ahmed (2003), A survey on trend and urban development pattern in Sanandaj using GIS and RS, Tehran, Fine Arts magazine, No. 16.

26. Park, S., Jeon, S., Kim, S., & Choi, C. (2011). Prediction and comparison of urban growth by land suitability index mapping using GIS and RS in South Korea. *Landscape and urban planning*, 99(2), 104-114.

27. Pauchard, A., Aguayo, M., Peña, E., & Urrutia, R. (2006). Multiple effects of urbanization on the biodiversity of developing countries: the case of a fast-growing metropolitan area (Concepción, Chile). *Biological Conservation*, *127*(3), 272-281.

28. Rezaei Moghaddam, Mohammad Hossein, Rezaei Banafsheh, Majid; Feizizadeh, Bakhtiar and Nazarmar, Hossein. (2010), Classification of Land Coverage / Land Use Based on Objective Technique and Satellite Images, Case Study: West Azarbaijan Province, 19-32.

29. Subudhi, B. N., Bovolo, F., Ghosh, A., & Bruzzone, L. (2014). Spatial-contextual fuzzy clustering with Markov random field model for change detection in remotely sensed images. *Optics & Laser Technology*, *57*, 284-292.

30. Subasia A, Erçelebib E (2005). Classification of EEG signals using the neural network and logistic regression, *Computer Methods and Programs in Biomedicine*; 78.

31. Samadi, Amir (1394). Use of Artificial Neural Network and Fuzzy Logic in Urban Development (Case Study: Urban City). Master's Thesis. The University of Tehran.

32. Student News Agency of Iran (ISNA): Kermanshah is one of the first four cities in the country in terms of marginalization, written on December 22, 2012.

33. Safari, Abdolreza, Leo, Hamid Reza, Homayouni, Saeed, Khazaee, Safa. (1393). Estimation of coastal depths by means of distortion distance imagery. Tehran: Scientific Journal - Extension of Surveying and Spatial Information Engineering.

34. Sliuzas, R. V. (2004). Managing informal settlements: A study using geo-information in Dar es Salaam, Tanzania.

35. Tayyebi, A., Pijanowski, B. C., & Tayyebi, A. H. (2011). An urban growth boundary model using neural networks, GIS, and radial parameterization: An application to Tehran, Iran. *Landscape and Urban Planning*, 100(1), 35-44.

36. Tewolde, M. G., & Cabral, P. (2011). Urban sprawl analysis and modeling in Asmara, Eritrea. *Remote Sensing*, 3(10), 2148-2165.

37. Wassenaar, T., Gerber, P., Verburg, P. H., Rosales, M., Ibrahim, M., & Steinfeld, H. (2007). Projecting land use changes in the Neotropics: The geography of pasture expansion into forest. *Global Environmental Change*, *17*(1), 86-104.

38. Yilmaz, I., "Landslide susceptibility mapping using frequency ratio, logistic regression, artificial neural networks and their comparison: A case study from kat landslides (Tokat-Turkey)"Computers *and Geosciences*, 35 (2009) 1125-1138.

39. Yaakup, A. (2007). GIS as new approach and method for preparing and implementing the development plan in Malaysian planning system. Jurnal Alam Bina, (7).

40. Zubairy, Muhammad and Alireza Majd (1380). Familiarize with remote sensing technology and application in natural resources. Tehran: Publishing and Printing Institute of Tehran University.

Factors of Formation of Native Housing in the Neighborhoods of Meybod City

Hamid Reza Varesi[1], Jamal Mohammadi[2], Mohammad Reza Jafari Nodoushan[3*]

1. Professor of Geography and Urban Planning, University of Isfahan, Iran
2. Assistant Professor of Geography and Urban Planning, University of Isfahan, Iran
3. MA in Geography and Urban Planning, University of Isfahan, Iran

Received: 20 July 2017 Accepted: 01 March 2018

Extended abstract

Introduction

Improvement of the quality of human life is necessary to enhance the quality of the residential environment because housing as a place of family life is a hub for comfort and relaxation. The characteristics of economic, social and cultural rights of individuals play important role in the selection and use of housing. The natural characteristics of each location are required for specific pattern of housing. However, today with technological advances housing is unfortunately developing in many cities without regard to these characteristics. City of Meybod City, Yazd province, has hardworking people with rich culture and ancient civilization. Therefore, the pattern that matches the characteristics of the native housing is of great importance and can greatly affect quality of life of citizens and reduce household costs..

Methodology

This study is an applied and development research in terms of target using descriptive-analytical research method.Data collection was conducted in two forms of library and survey.. We made a survey to complete questionnaire by citizens and experts. Statistical population of the research is population of 66907 people of Meybod with 17,629 households. According to Cochran formula, we determined 380 heads of households as sample size. In order to determine the most important factors affecting the formation of native housing in the city Meybod, the questionnaire have been completed by experts, professors and local authorities using factor analysis in SPSS to analyze the results of the questionnaires.

Results and discussion

In order to determine the appropriate test of this research, we initially tested normality through the Kolmogorov-Smirnov. We used nonparametric test for Mann-Whitney U and Kruskal-Wallis.

In order to determine whether the old and new textures of Meybod city are developed based on native housing indicators, we have used Mann-Whitney U test. This test shows that the Z value is less than 1.96 with a significance level of less than 0.5. Thus, there is a significant difference between native housing indicators in the old and new textures of Meybod city. In order to identify the indicators for native housing in the Meybod city, we have also used Kruskal-Wallis Test in SPSS. There is also a significant difference in the indicators of native housing. The indicators of socio-cultural and physical indicators have relatively better condition.

* Corresponding Author: mreza.j1371@yahoo.com Tel: +989137084185

To determine the most important factors affecting the formation of native housing in the Meybod city, 43 components is considered for assessment and weighing of the results using factor analysis. Eventually, 4 factors with 33 indicators have been named as follows: the first factor: the social and physical, the second factor: the economic, the third factor: services and infrastructure, the fourth factor: the culture.

Conclusion

In order to evaluate the native housing in the city, four indicators of socio-cultural, economic, physical, and service – infrastructural aspects are analyzed using Kruskal-Wallis and U Mann-Whitney test. The results have indicated that there is a significant difference between the neighborhoods of the Meybod city in native housing indicators. Indicators of socio-cultural and economic indicators in the old neighborhoods of Meybod city have better situation relative to the physical indicator and infrastructural services. The results obtained from the factor analysis technique shows that 33 factors can be effective in achieving native housing in the Meybod city. Thus, it is expected that in the future planning of housing in the city Meybod, we can apply housing planning to improve the situation of native housing.

Keywords: native housing, housing planning, Meybod City.

References

1. Asghari Lafmajani, Sadegh and Bardbar Golvi, Azam, 2015, Investigating the Benefits of Native Habitat of Zabol, National Conference on Architecture, Civil Engineering and Physical Development.
2. Pourmohammadi, Mohammad Reza, 2013, Housing Planning, 11th Printing, Publishers Samt, Tehran.
3. Tavassoli, Mahmoud, 1981, Construction of the city and architecture in the warm and dry climate of Iran, Fourth edition, Tehran.
4. Hekmat Nia, Hassan and Ansari, Jinous, 2012, Meybod Housing Planning with Sustainable Development Approach, Human Resource Research, No. 79, 191-207.
5. Rahaie, Omid, Pirouz, Bahar and Feyzas, Mahnaz, 2013, Explaining the Principles of Sustainable Housing; A Way to Its Endeavor, the International Conference on Civil Engineering, Architecture and Sustainable Urban Development.
6. Zandi, Kayhan, 2014, Investigating the Situation of Urban Housing (A Case Study of Isfahan City, 1990-2010), Master's Thesis, Faculty of Geography and Planning, University of Isfahan.
7. Saeednia, Ahmad, 2004, Green Book Municipalities Guide, Urban Centers System / Residential Spaces, Vol. 4, Publications of the Organization of Municipalities and Daisies of the Country.
8. Shi, Ismail, 2012, Introduction to the Basics of Urban Planning, University of Science and Technology, Tehran.
9. Askari, Ali and Derakhshani, Pedram, 2002, Urban Land Use Planning: Systems and Models, Publishing House, Hamedan.
10. Gholami, Gholam Hossein and Kazemi Tahereh, 2014, Investigation on the spatial features of the historical houses of the city of Meybod, the first National Conference on Civil Engineering, Architecture and Sustainable Development.
11. Fallah, Alireza, 2010, Out of Structures of Meybod Organ, First Edition, Amir Seyed Ali Zadeh Publishing, Yazd.
12. Statistics Center of Iran, 2011, Statistics and information of the population and housing in Meybod.
13. Design and Exploration Consultant Engineers, 1998, Meybod County Master Plan.

14. Architectural and Urban Development Consulting Engineers, 2007, Meybod Comprehensive Plan.
15. Naghizadeh, Mohammad, 2012, A Reflection on Understanding the Foundations of Iranian Islamic Housing, Moon Art Book, No. 170, 38-55.
16. Yakob. H, Yusof. F, Hamdan. H, 2012, Land Use Regulations towards a Sustainable Urban Housing: Klang Valley conurbation, Procedia - Social and Behavioral Sciences 68, 578 – 589.
17. Alkhalidi, A, 2013, Sustainable Application of Interior Spaces in Traditional Houses of the United Arab Emirates, Procedia - Social and Behavioral Sciences, 288 – 299.
18. Shahli, F.M, MohdHussain,M.R, Tukiman,I and Zaidin, N, 2014, The Importance Aspects of Landscape Design on Housing Development in Urban Areas, APCBEE Procedia, 311-315.
19. Iwuagwu Ben. Ugochukwu&Iwuagwu Ben. Chioma M, 2015, Local building materials: affordable strategy for housing the Urban poor in Nigeria,Procedia Engineering 118, 42 – 49.