Assessment of the implementation of pedestrian-oriented plan in central texture of Dezful City, in the views of residents and shopkeepers

Yones Gholami [1*], Mohsen Shaterian [2], Mohammad Reza Bosehagh[3], Masoumeh Jahani[4]

1. Assistant Professor of Geography and Urban Planning, University of Kashan, Kashan, Iran
2. Associate Professor of Geography and Urban Planning, University of Kashan, Kashan, Iran
3. PhD in Geography and rural planning, University of Kashan, Kashan, Iran
4. MA in geography and urban planning, University of Kashan, Kashan, Iran

Received: 13 September 2016 Accepted: 1 May 2016

Extended Abstract

Introduction

Nowadays most of the urban public spaces and streets are being heavily dominated by the machines due to the irregular increases in the vehicles numbers and dependency of living pattern on them. This has made a lot of problems in the civil issues, including increase in the ecological pollution, increase in the maintenance costs, and etc. For this reason, walkability plans are now considered as a solution for decrease these problems. Imam Khomeini Street, located in Dezfoul City, is one of the main streets in which the traffic of riders and pedestrians is very high and this has made several traffic problems in this part of the city. In order to decrease the traffic problems caused by the vehicles, the walkability plan was suggested for this area of this city.

Methodology

The purpose of this research is to study spatial potentials for implementation of the pedestrian-oriented plan in Imam Khomeini Street, Dezful city. In fact, Imam Khomeini Street of Dezful city, in the old part of the city, is due to increased transportation. A solution to the problems of population congestion, pollution from vehicles and increased safety of pedestrians is implementation of the pedestrian plan in the central texture of Dezful city. This area is considered as the main transportation center in the old texture of this city. So, traffic congestion reduces the efficiency of this sector as well as the destruction of the old texture value. For this reason, implementation of the Imam Khomeini street pedestrian plan can be helpful in maintaining the value of this texture and improving transportation in the area.

* Corresponding Author, Email: yonesgholami@ymail.com

Results and discussion

This present research has a descriptive-analytical method using documentary and filed works. Scope of project implementation in this area is a distance, approximately 840 meters long. The exact details of the population of this section are not available. In the field method, we have used questionnaires in order to study the satisfaction of the inhabitants and business people of implementation of Imam Khomeini street plan. Thus, the data have been collected from the questionnaires. The statistical population of this study was residents and trades people of Imam Khomeini Street. We have used random sampling regarding the uncertainty of statistical population to distribute questionnaires. The sample size of this study was 96 people that obtained through the Cochran formula. For data processing, we have also used SPSS and AMOS software for analysis of the questionnaire and also ArcGIS software for spatial analysis of the pedestrian plan.

Conclusion

In order to analyze satisfaction of business people and residents about the implementation of a walking plan with social, economic, physical and environmental dimensions, we have applied single sample T Test in SPSS to compare the desired variables with average value. Since in each factor measured by the likert scale the number 3 is considered as the midpoint, the data in each of the indicators are measured with this number. To identify the variables and factors that affect the acceptance of the residents and trades people from the implementation of the pedestrian plan, the modeling of structural equations and Amos software have been used to find the most important and the most effective variables on pedestrian plan. In fact, we are looking at these issues, which are the views of the business community and the inhabitants in format of social, economic, physical and environmental dimensions about implementation of Imam Khomeini Street Pedestrian Plan. Therefore, with the theoretical foundations of the research in second-order factor model it was based on four hidden economic, social, physical and environmental factors.

According to the results of T-test, the average satisfaction of residents and trades people were over 3 which showed their satisfaction of the pedestrian plan; because these people thought that the implementation of the plan would increase the traffic in this section and the traffic can also increases sales. The group, despite considering that the implementation of the plan would increase the problems of personalized vehicle traffic, but they looked at the positive aspects of the design.

Also, the result of the modeling of structural equations showed that the social factor was the most effective term in accepting the pedestrian plan among residents and trades people; because pedestrian roads have a major social role that can bring liveliness into urban spaces and encourage people to volunteer in the city. Thus, such plans are usually accepted by the public especially shopkeepers, which reflect the satisfaction of people living within the scope of the project.

Keywords: pedestrian area, walkability, central texture, Dezful City

References

1. Department of Housing and Urban Development, 1374. **Regulations designed urban roads**, Part 1, Foundations
2. Latif pour, Ahmad, **history of Dezful**, Tehran, Farhang maktub Publications
3. Mobaraki novin, Milad, 1390. **Pedestrian-oriented Urban Passages (Case Study: Street Bu-Ali Sina in Hamedan)**, Ideas Festival and superior design in the West Country

4. Rismanchian, omid, 1388. **Check out some layers in terms of pedestrian improvements,** Garden view Journal, No 11, Sixth year

5. Sadeghi, Narges. 1394**. Evaluation of Factors Affecting The walkability and increased Presence citizens in Pedestrain area in order to build Sustainable urban sidewalks (Case Study: The Downtown streets of Hamedan)**, The first national conference on sustainable urban development, International Convention Centre Shahid Beheshti University

6. Sarafi, Mozafar & Hasan Mohammedan mosamam. 1391. **Feasibility pedestrian area the downtown streets of Hamedan**, Journal of Environmental Logistics, No 21, pp 111-125

7. Shahivandi**,** Ahmad & Mahmoud Ghalenoei. 1392. **Analysis of walking capability Pedestrian routes Isfahan,** Practical Researches Geographical Sciences, No 31, pp 73-91

8. Tajik, Arezoo & Parvin partovi. 1393**. Conceptual and analytical framework walkability With emphasis on New Urbanism Approach,** Journal – Research Urban Studies, No 9, pp 81-96

9. C.Deehr, Rebecca & Amy Shumann, 2009, **Active Seattle Achieving Walkability in Diverse Neighborhoods**, American Journal of Preventive Medicine, vol 37, pp 403-411.

10. Frank, L.D., James, S.F., Terry, C.L., Chapman, J.E., Saelens, B.E., Bachman, W. 2006. **Many. pathways from land use to health: Associations between neighborhood walkability and active transportation**, body mass index, and air quality.Journal of the American Planning Association, 72(1), 75–87. http://dx.doi. org/10.1080/01944360608976725.

11. Gehl, Jan, 1987. **Life between Buildings**. Van Nostrand Reinhold.p 24.

12. Gemzoe, Lars and Gehl, Jan. 2006**. The Copenhagen experience what the pedestrian wants**, Ekim Tan Delft University of Technology photos.

13. Grignaffini, S. Cappellanti, A. Cefalo. 2008. "**Visualizing sustainability in urban conditions**", WIT Transactions on Ecology and the Environment, Vol. 1, pp. 253-262, 10 Jun 2008.

14. Hass-Klau, Carmen & Graham Crampton, Dowland, C., and Nold, I. 1999, Streets as Living space: Help-ing public places play their proper role. London: Landor Publishing.

15. http:// www.walk21.com.

16. Lerman, Yoav & Itzhak Omer, 2015. **Urban area types and spatial distribution of pedestrians: Lessons from Tel Aviv**, Computers, Environment and Urban Systems, 55 ,11–23.

17. Litman, Todd Alexander. 2014. **Economic value of walkability**, Victoria Transport Policy Institute, Pages 250-360.

18. Murrain, Paul. 2002. **Understand urbanism and get off its back. Urban Design International**,

19. Pivo, Gary & Jeffrey Fisher. 2011. **The Walkability Premium in Commercial Real Estate Investments**, Real Estate Economics. Vol 39. PP 185-219.

20. Shamsuddin Shuhana, Nur Rasyiqah Abu Hassanb & Siti Fatimah Ilani Bilyamin. 2012. " **Walkable Environment in Increasing the Liveability of a City**", Procedia - Social and Behavioral Science. Vol 50. PP 167–178.7, 131–142. http://dx.doi.org/10.1057/palgrave.udi.9000081. smart growth? Retrieved from http://www.epa.gov.

21. United States Environmental Protection Agency & Smart Growth Network. 2010. **What is smart growth?**, Retrieved from http://www.epa.gov