Feasibility of Pedestrian and its Influence on the Regeneration of Historical Tissues of Cities (Case Study: Qiyam Street in Yazd City)

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Extended abstract

1. Introduction

The concept of pavement was introduced in the 1950s to ease the traffic congestion of old downtown streets to competed with suburbs. The primary purpose of the present study is to investigate the feasibility of making the current historical pedestrians of Qiyam Street walkable and analyze the potentials of the regeneration of walkability in historical passways. This study determines the impacts of making Qiyam street walkable on the regeneration of the historical tissue of Yazd. Against this background, the research attempts to answer the following key questions:

- Which dimensions and indicators should be prioritized in making Qiyam street of Yazd walkable?
- Can the historical tissue of Yazd be regenerated by improving the walkability of Qiyam street?

2. Review of Literature

Due to the importance of historical buildings and urban tissues, extensive efforts have been made to eliminate the factors that pose a risk to monuments in the world. At the forefront of these activities was banning cars from entering historical sites and around valuable buildings. In line with the global actions, some similar steps have been taken in Iran. In this regard, one can infer that the first steps were taken during the Second Pahlavi era when cars were prohibited from passing on historic bridges such as Khaju Bridge in Isfahan. What is certain is that the role of the pavements in preserving historical monuments and textures is not negligible. The results of previous studies indicated thet these factors are of great importance: 1. social-management issues; 2. environmental equipping strategies; 3. relaxation; 4. pedestrian priority; 5. public transport; and 6. safety and infrastructures.

3. Method

The present study is applied-developmental. It is descriptive-analytical regarding nature and method. Library, documentary, and survey methods were used to collect data.

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4. Results and Discussion

In this study, three basic steps were designed to evaluate the feasibility of walkability and its impact on the regeneration of the historical tissue of the study area. The first step was the AHP (Gaussian preference function) method. In the second step, the overall preferences were calculated using the Prometheus method. In the third step, the regression analysis (ANOVA) was used to correlate between improving the pedestrian capability of the historical pathways and the regeneration of the historical tissue of the study area.

Overall, the results of this study were not consistent with the findings of Stangl (2011), Monteiro and Campos (2012), Sapawi and Said (2012), Kermanshahi, Azizi and Darzi Ramnadi (2016), Habibi and Haghi (2018), and Ghorbanpour, Zali, Yordkhani and Azadeh (2018), who suggested that walkability design and planning requires attention to socio-managerial issues, environmental strategy, relaxation, pedestrian priority and public transport, safety and infrastructure. This study concluded that accessibility should be taken as a priority when planning for the walkability of Yazd. It was also in line with the studies of Pikora, Giles-Corti, Bull, Jamrozik and Donovan (2003), Kalantari Khalilabad, Soltan Mohammadlou and Soltan Mohammadlou (2016), and Rabbani Abolfazli, Rahnam and Khakpoor (2017), who concluded that walkability planning leads to public health and quality of life. This study similarly found that planning for walkability can lead to the regeneration of the historical tissue of Yazd.

5. Conclusion

Four hundred people (experts and pedestrains who had passed on the sidewalk of Qiyam street of Yazd) were asked some questions via questionnaire. They responded according to their different conditions. Based on AHP (Gaussian Preference Function) and Prometheus analysis, interviewees showed that the level of walking paths, cleaning, illumination in day and night, continuity of walking paths and the slope of sidewalk, as well as accessibility, have to be highly prioritized due to their higher weight. In contrast, the indicators of lack of passage barriers, the existence of windows overlooking the sidewalk the development of various applications for the use of pedestrian facilities, and the relationship between transport and pedestrian use should be low prioritized according to their lower weights. Besides, the regression analysis (ANOVA) was used to correlate the improvement of the pedestrian capability of the historical pathways with the historical texture of the study area. Therefore, it can be inferred that enhancing the pedestrian capability of Qiyam Street in Yazd through the appropriateness of pedestrians' width, pedestrian crossing, encouraging people to walk, etc. can lead to the regeneration of Yazd's historical issues.

In Yazd, in order to take proper advantage of the walkability approach in the historical areas of the city, especially in Qiyam street, understanding the importance, position, and function of pedestrian spaces are of importance. It is necessary to organize these spaces according to a holistic approach and using the principles of shortening and localizing trips, providing complete and varied coverage of pedestrian networks in the city, maintaining continuity of routes,

improving road safety and comfort, providing the necessary visions, providing the necessary equipment and providing social reinforcement.

Keywords: Regeneration of Historical Tissues, Qiyam Street, Yazd City, Pedestrian Ability

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