# Evaluation of effective factors on strengthening the vitality of urban walkways (Case study: Alam-al-hoda walkway in Rasht)

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# EXTENDED ABSTRACT

# Introduction

Increasing population growth in urban areas and car dependency creates many negative socioeconomic, physical and environmental impacts for cities, so cities today need many urban public spaces to reduce the negative impacts of population and building density. If urban spaces as a space accessible to everyone for social actions are not in a high quality, they will have undesirable impacts on the various aspects of urban life. The emergence of these issues reveals the importance of the existence of walkways and their vitality. On the other hand, more people's satisfaction from urban spaces leads to more use of these spaces and ultimately brings vitality.

# Methodology

In this study, with the purpose of assessing the status of walkways' vitality and with the descriptive-analytical research, Alam-al-Hoda walkway of Rasht is evaluated. Questionnaire is designed based on the conceptual model and within the framework of Likert scale. Validity and reliability of the questionnaire is approved. In this regard, questionnaires have been asked out of 380 users of this space randomly. SPSS software is used to analyze the data of the questionnaire. Then, Strategies were presented with the help of the SWOT technique and 20 experts in the field of urban planning were interviewed to prioritize strategies with the help of the AHP technique. Finally, action plans are presented for each strategy.

# **Results and discussion**

In order to assess the vitality of Alam\_ol\_Hoda walkway, land use and activity, physical, access and connection and environmental and climatic criteria are evaluated based on the results of the questionnaire analysis. In the land use and activity Criterion, the index of people's use of pedestrian walking and the index of diversity of people's activities in the place have gained in order the first and the last rank. Also, in the physical criteria, the index of lighting and level of

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security ranked the first and the urban furniture index ranked the last. In the access and communication criterion, the location index and the index of movement fluency on the streets around the walkway have gained the first and the last rank in order. Also, in the climatic and environmental Criterion, the environmental health index ranked first and climatic comfort index had the lowest score. On the other hand, among the criteria, the criterion of land use and activity has the highest mean, and the climate and environmental index has the lowest average. Then, in the table of SWOT, the status of vitality of Alam\_ol\_Hoda walkway is evaluated and strategies are presented. According to table 1, these strategies are ranked by the AHP technique.

Table 1-Ranking strategies with the AHP technique

strategy	score	rank
Strengthening specified buildings and Signs	0.051	7
Strengthening cultural places in order to increase the social interactions of citizens	0.093	4
Creating living spaces on the top floor of the buildings in the walkway and Streets around	0.035	10
Organizing the pedlars in the walkway	0.039	8
equipping the place based on the climate of Rasht to increase the presence of people in the space	0.228	1
Increasing parking capacity around the walkways	0.030	11
Improving vegetation status	0.019	13
Planning for diverse activities for different age groups	0.095	3
Compilation and implementation of rules for billboards	0.038	9
Applying the criteria for new buildings' facade according to the traditional architecture of Rasht	0.056	6
Designing statues with identity of the Gilani's original tradition and culture	0.057	5
Locating urban furniture and equipment appropriate to the climate of Rasht and its adjacent land uses	0.0226	2
Increasing the continuity of the walkway	0.014	14
Improving public transport and promoting walking and cycling in the routes access to the walkway	0.021	12

Among the strategies, the strategy of "equipping the place based on the climate of Rasht to increase the presence of people in the space" is ranked first. In fact, this strategy is the first priority to promote the vitality of the walkway. The strategy of "Increasing the continuity of the walkway" has been rated the last rank. In fact, according to the experts, this strategy has a very little effect on the level of space vitality. Then, action plans for each strategy are presented.

# Conclusion

Due to the increasing population growth in cities and the negative consequences, walkability should be taken into consideration. Formation of a walkable urban space is the first step. After the formation of these places, it is important to improve their quality and vitality. This research studies the viability of walkways and Alam-al-Hoda walkway of Rasht as the case study based on four criteria (land use and activity, physical, access and connection and environmental and climatic) is evaluated. In the land use and activity Criterion, the index of diversity of people's activities in the place, in the physical criteria, the urban furniture index, in the access and communication criterion, the index of movement fluency on the streets around the walkway and in the climatic and environmental Criterion, climatic comfort index have the lowest score.

Finally, strategies were presented based on the SWOT table and ranked by AHP technique. The strategy of "equipping the place based on the climate of Rasht to increase the presence of people in the space" is ranked first and the strategy of "Increasing the continuity of the walkway" is rated the last rank. In fact, strategies with higher privileges will prioritize to less privileged

strategies, because they have greater impacts on the vitality of the Alam-al-Hoda walkway from the viewpoint of experts. In the final stage, based on the strategies of the SWOT table, which are rated according to the opinion of the urban experts, action plans are ranked to enhance the vitality of the walkway. It should be noted that the action plans of higher-ranking strategies will play greater roles in strengthening the walkway vitality.

Key words: vitality, walkway, urban space, Alam-al-Hoda in Rasht