

# Improvement of Environmental Quality and Satisfaction of Living in New Neighbourhoods by Priority of Actions on the Basis of Residents' Views (Case Study, Kashan)

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**Introduction:** Historic cities and neighbourhoods in Iran couldn't adjust themselves to quick changes of the recent decades and have lost their quality in many aspects. Regardless of different cultural, economic and social conditions, new neighbourhoods have been formed next to old areas of the cities. Although these new areas welcomed new functions, they couldn't provide suitable environments for their residents. This paper intends to promote the environmental quality and people satisfaction of living in neighborhood by recognizing and prioritizing the main environmental quality factors which have effect on satisfaction of living in neighborhood. Ghotb-E-Ravandi neighborhood where is developed in the last few decades was selected for this study. This neighborhood is located adjacent to historical fabric of Kashan City, in center of Iran.

**Materials and Methods:** The research method is an evaluation of residents. To determine the required samples for the evaluation, Cochran technique was applied. The indicators were measured by questionnaire was distributed among 164 residents or 321 housing units in Ghotb-E-Ravandi Neighbourhood. The actual samples were selected by the systematic sampling method by mapping the housing units. Data obtained through the residents interviews were entered into a microcomputer and then analyzed by using SPSS. Each indicator was measured by at least two questions with five different answer levels (very high, high, moderate, low, and very low). Finally arithmetic mean of each category of questions was obtained and scores of each indicator was applied in factor analysis technique.

**Results and Discussion:** The indicators are including physical qualities, social relationships, accessibility, place identity, vitality, safety, security and urban facilities. These indicators, mostly qualitative in nature, were then divided into several subindicators, based on area, city, and social and cultural contexts. To do this, the 32 indicators were selected from other studies and literature reviews. Because of the large number of indicators, multiple linear regression analysis cannot run in one step. Therefore, the 32 indicators were summarized in 6 factors by using factor analysis technique (Table 1). To find the relation between residential environment quality and satisfaction of living in neighborhood, multiple linear regression analyses were used. In this analysis, dependent variable is satisfaction from living in new neighbourhoods and independent variables are the 6 factors which are extracted from factor analysis technique. By using multiple linear regression in SPSS, results of the study is summarized in 6 different models. In the models, the sixth one includes more variable and higher adjusted R square value (75.1%) compared with others. Such figure covers 75.1% of changes of the satisfaction from living in neighbourhood that includes highest percentage among models. Besides, the Std. errors of the estimate are less than other models. Confidence interval in all factors is 100% and DW1 statistical test is 2.3 which are appropriate for this model.

**Conclusions:** Correlation of 75.1 percent between dependent and independent variables shows the impact of environmental quality on satisfaction from living in neighbourhood. In the same way 75.1% of changes in dependent variable could be explained through independent environmental qualities variables.

Therefore, environmental quality has direct relationship with satisfaction of living in neighbourhood. For prioritization of indicators, Beta quotient which shows the proportion of each factor on the satisfaction was used. Then, by multiplying the Beta quotient by the proportion of each indicator in their factor, the impact of each indicator was recognized in the satisfaction. In the next step, by multiplying this amount by inverted average of indicator grade, the arrangement of priority of indicators for promotion of satisfaction by living in neighbourhood can be achieved. At the end, for promotion of the satisfaction, some solutions was recommended. The main physical indicators that should be considered to promote the satisfaction are including neighbourhood that is well-connected with important parts of the city, aesthetic aspects of the neighbourhood, mixed use, neighbourhood center and sense of central location.

The main social indicators are residents' responsibility, social interaction and participation in public activities, and interaction with city managers.

environmental quality, neighbourhood, priority of actions, satisfaction by living in neighbourhood

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