

The Effects of Service Provision and Construction Activities in Iranian Villages on Villagers' Subjective Perceptions of Rural Life within the Concept of Quality of Life: The Case of Hamadan Province

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ABSTRACT

The concept of quality of life in the rural context has developed and changed to a great extent since its introduction back in the 1930s. Today, this concept is an important tool in the hands of rural policy-makers and planners for identification and evaluation of current conditions, assessment of the effects of previously implemented policies and determining the direction of future policy-making. This concept includes both the objective and subjective dimensions of rural quality of life. The objective rural quality of life refers to all the facilities and services available to the residents of a rural settlement. The subjective rural quality of life, however, refers to the perception of these facilities and services and the overall satisfaction and happiness of the residents. The present study has been conducted with the aim of analyzing the rural quality of life in Iran. The villages of Hamadan Province, situated west of Iran, were selected as the study area. This study has analyzed the mentality of the village residents based on seven objective indices of quality of life using structural equation modeling and the SmartPLS software. The results indicated that rural housing facilities have been significantly effective in increasing the villagers' satisfaction and quality of life. Deviation from traditional rural lifestyles and modernization of the villages were also revealed to be among the factors which have reduced the villagers' quality of life.

Keywords: Hamadan; Objective Quality of life; Rural Quality of Life; Structure Equation Models; Subjective Quality of Life

INTRODUCTION

Identifying, measuring and improving the quality of life has been a major goal among researchers, planners and institutions during the past few decades. Many disciplines such as sociology, psychology, economics, environmental science, geography, medicine, etc. have studied quality of life from different viewpoints. This concept has been one of the buzzwords in social sciences since 1960s. Back in those years, it was proposed that economic development does not necessarily entail improvement of the quality of life (Das, 2008). The concept of "progress", which was the most important goal in the area of national development in the early 20th century and which had a strong economic flavor, has been gradually replaced by the broader concept of "quality of life". In the rural context, the concept of quality of life gains significance in the rural policy-making of both developed and developing countries in two aspects: internal and external. Regarding the internal aspect, the significance is reflected in topics such as evaluating the effects of social policies, improving social services, encouraging public participation, promoting human rights and equal distribution of resources, research

guidance, education, allocating resources to and developing services in areas with special needs, guiding macro- and micro-level decision-making in allocating resources, etc. The external aspect of quality of life has become ever more significant with the growing globalization trend.

On the other hand, scientific studies have indicated that the relationship between economic progress and quality of life is not linear. The two concepts share the same course until a specific point, which is the minimum requirements for living. From this point onward, it cannot be expected that fulfillment of economic needs contribute to the improvement of the quality of life since human is a multi-dimensional and complicated creature and economic logic cannot single-handedly explain many of its behaviors (Costanza et al., 2016). People are increasing becoming more aware of the social costs and ecological impacts of economic growth, and researchers have realized that the growth of GDP (gross domestic product) is not able to continuously improve the quality of life (Glatzer, 2006).

As a result of this, planners have turned their attention toward the need for identifying, measuring and improving the quality of life in specific places or for specific

individuals and groups. As a special settlement in every country, a village is an indispensable part of development and growth. Every country is a car in the global train; therefore, the issue of rural settlements needs to be studied at a global scale and be governed by specific policies and principles. At every country, this is a national issue which requires international experience sharing (Zakerhaghghi *et al.*, 2015; Papeli and Yazdi, 2007). Acquiring sufficient knowledge about the services and construction projects, which have been rendered and implemented in these areas and evaluating and comparing them with the experiences of other countries within the concept of quality of life, seems a necessary course of action (Aram *et al.*, 2019). The cooling effect of large-scale urban parks on surrounding area thermal comfort. *Energies*, 12(20), 3904

The Iranian province of Hamadan, being located in a mountainous area, has long accommodated many settlements. Throughout time, these settlements have become the villages of the province (Serpoush *et al.*, 2017). Currently, Hamadan has more than 1000 human settlements. During the past three decades, government and public institutes have implemented various projects and plans for developing and improving the villages of Hamadan Province (Kahvand *et al.*, 2015; Rahmani *et al.*, 2013). A review of these projects and plans indicates that the majority of them have been operationalized based on the objective indices of quality of life (Khanian *et al.*, 2019). In fact, most of them are related to service provision and construction. This has resulted in a notable improvement in the objective aspect of quality of life in these regions. The residents' subjective quality of life (overall satisfaction), however, seems to have had little improvement considering the high rate of migration from the villages to the adjacent cities and according to the conducted field studies.

In this regard, the present study attempts to answer this essential question: What critical paths does the villagers' perception of quality of life in their villages follow? In other words, this study aims to analyze the essential factors which affect satisfaction in villagers. In order to achieve this aim, the villages of Oshtoran, Varkaneh, Habashi, Gashani and Heydareh Ghazikhan were selected for study because of the high number of construction and service projects implemented in them.

A review of the concept of quality of life, different approaches to this concept and the factors which affect it

The quality of life is a global phenomenon which has become a major point of concern in the 21st century in both developing and developed countries. Today, studying quality of life and its impacts on human behaviors have gained more significance in social and behavioral sciences (Dissart and Deller 2000; Diener and Suh, 2000; Diener and Biswas-Diener, 2008). In addition to social and behavioral sciences, this concept has become an important topic in other areas. For example, Lambiri *et al.* (2007)

have indicated that quality of life is now an initial concept in economic studies.

The concept of quality of life has a few interesting traits: (a) it only applies to human life; (b) it is rarely used in the plural form (i.e. qualities of life); (c) it is a general indivisible term that can have a pure meaning; (d) it can hardly be categorized separate from and independent of sociology-related sciences (Dissart and Deller, 2000). In 1983, Liu defined the quality of life as a fancy word to refer to the old concept of the material and psychological well-being of people in their living environment. Smith *et al.* (2007) defines quality of life as social well-being. The quality of life is a complex and multidimensional concept about a population's conditions at a specific geographical scale (village, city, country, etc.) which includes both subjective (qualitative) and objective (quantitative) indices (Hsieh, 2003). The definitions of this concept vary greatly because it is used differently in each discipline; however, it can be suggested that quality of life generally refers to the attributes of people's living environments (such as air and water pollution, housing problems) and some of the characteristics of people themselves (such as health and educational success) (Pacione, 1986).

Based on the above-said definitions, the keywords in defining the quality of life can be narrowed down to: objective facts, subjective perception, well-being, enjoyment, physical environment and life satisfaction. So far two approaches have been adopted by researchers in conducting their studies on quality of life: the first approach involves analysis of quality of life-based on indices extracted throughout time such as statistics related to the quality of life perception (income, crime rate, pollution levels, house price, etc.). The second approach involves modeling the relationship between urban environment characteristics and the mentality which individuals form based on the perception of quality of life. This approach focuses on satisfaction with specific phenomena and the life in general. It typically involves data collection via field studies and analysis of the collected data by such methods as regression analysis or structural equation modeling (Marans, 2011).

Bruce Wick and Duffy have presented three general viewpoints based on these two approaches: (a) quality of life from the viewpoint of an individual's real life conditions (objective quality of life); (b) quality of life from the viewpoint of an individual's satisfaction with life conditions (subjective quality of life); (c) quality of life from a combined viewpoint, both real life conditions and satisfaction with life conditions (Felce and Perry, 1995).

The general consensus among researchers about the quality of life is that it is possible to form a better and clearer picture of the concept at different spatial and temporal scales by integrating the objective and subjective dimensions. Therefore, any comprehensive evaluation of the quality of life must include both objective and subjective indices. Such an evaluation is able to draw upon the advantages of both approaches in order to acquire

more reliable and more credible information about the quality of life. Despite this, the intensity of the relationship between subjective quality of life and objective quality of life is often subject to conflicting arguments. Brereton et al. (2011), for example, concluded that the relationship between the two indices is strong. However, the relationship between the subjective and objective dimensions has not been clearly determined. The reason might lie in the above-said issues and the differences between the places which have been studied.

A review of the common conceptual models of measuring quality of life

One of the classical studies on quality of life was conducted by Liu back in 1976 in the metropolises of the United States. Liu used physical data in his study as he believed that psychological data were not appropriate for quantification. As a result, the indices of his study were objective. The physical data related to the general quality of life consist of five dimensions which together shape the concept of quality of life. These dimensions majorly deal

with the common concerns of people in their daily lives: (1) economic dimension, (2) political dimension, (3) environmental dimension, (4) health and education dimension, (5) social dimension. In 1991, Maran and Mohai proposed another model for measuring the quality of life in which physical health can be associated with objective attributes. The model has been presented in Figure 1. According to this model, environmental attributes affect social quality, personal activities, satisfaction and physical health in two ways:

Environmental amenities 2) Urban amenities, (Maran and Mohai, 1991). This model assumes that individuals' perception of environmental and urban amenities affects the assessment and the manner of using such amenities. Mendes and Motizuki (2001) studied urban quality of life in São Carlos using the weighted linear combination (WLC) method, the ordered weighted average (OWA) method and fuzzy logic. They reported the results in five dimensions: commerce and service, crime, environment, housing and mobility.

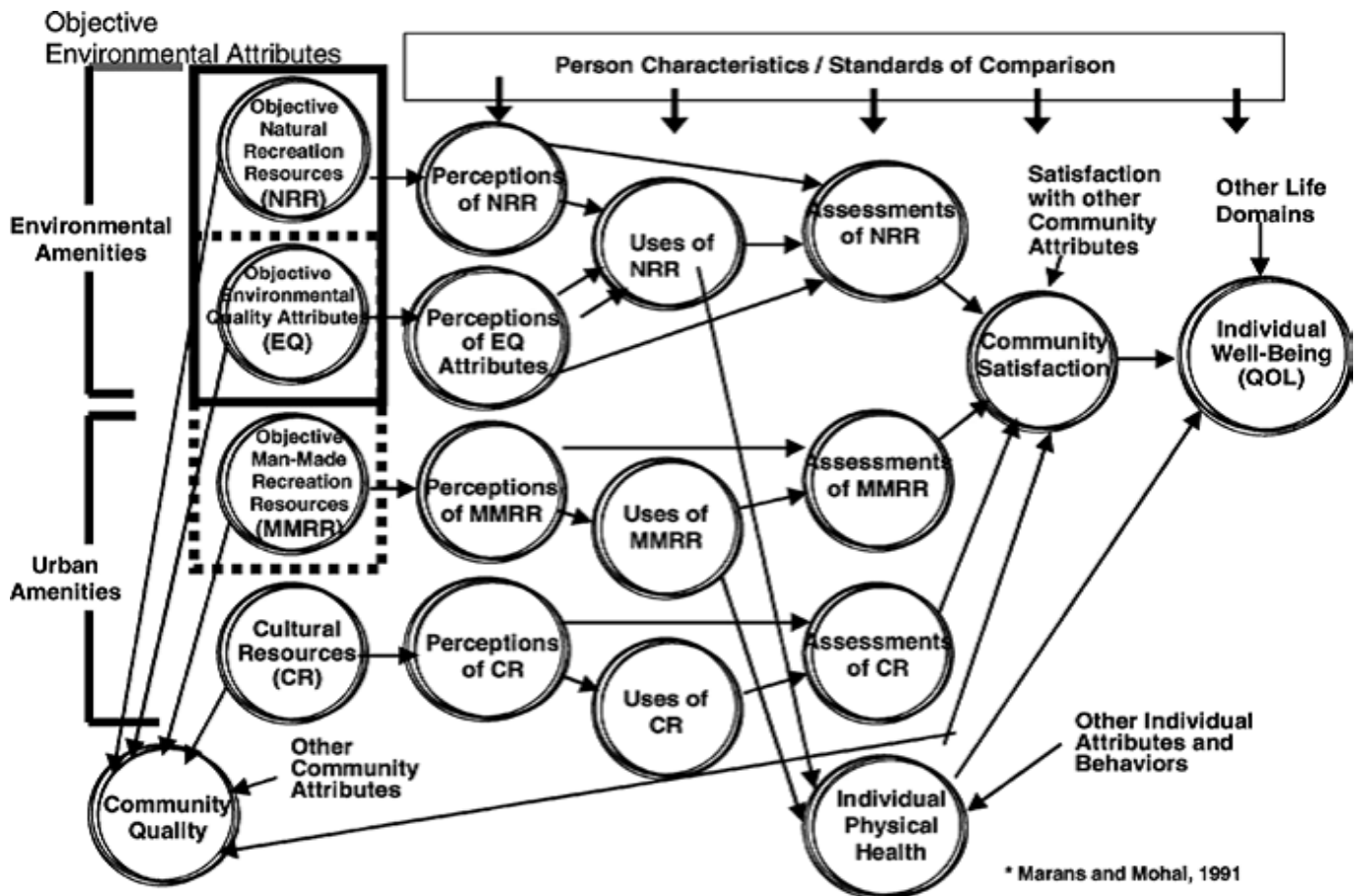


Figure 1. A model of the relation of resources, recreational activities and environmental quality to individual well-being, physical health and community satisfaction (Marans and Mohai, 1991).

In the model proposed by Mitchell et al (2000), quality of life is the product of six components. Health rests on top of their model which includes both mental and physical health. The second component is physical environment which includes the structural-physical and environmental aspects of the living place as well as factors such as climate, pollution, inconveniences caused by environmental hazards, visual quality and landscapes. Natural resources, commerce and services, which cover the basic requirements of modern life, together form the third component of the model. The fourth component consists of social and political dimensions in the form of local community development. The fifth component is individual development and growth, which somehow results from recreational elements. Last but not least is security which covers the topics of residence security, individual economic security, administration of justice, crime rate and the overall security of the society.

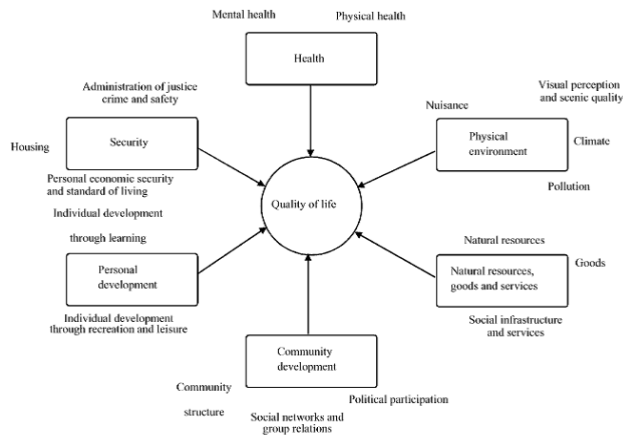


Figure 2. Components of quality of life (Mitchell, 2000).

A conceptual model of the factors affecting rural quality of life in Iran

Studying rural quality of life is significantly important because of the problems and difficulties which village residents have to face. Regarding the various economic and ecological problems of rural settlements as well as the growing trend of migration from these settlements to adjacent cities, this study aims to take effective steps in rejuvenating these settlements with emphasis on improving the quality of life, via path analysis of the subjective perception of objective quality of life. For this purpose, the theoretical framework of this research was formed after conducting theoretical studies and reviewing the related literature.

A theoretical framework is a theoretical approach or outlook which is adopted to analyze an issue referred to in the study questions. This framework is the result of studying and reviewing different theories and viewpoints in the related literature. According to Quivy and Campenhoudt (2008), this theoretical framework results from either selecting an appropriate theory from among

various theories reviewed in the related literature or is a new framework made for the study at hand. Considering the practical requirement of this study, the second case, namely making a new theoretical framework, was the more appropriate approach. The framework has been presented in Figure 3.

As it can be seen in the model, the seven indices of “rural house”, “recreation”, “health”, “safety and security”, “rural infrastructure”, “rural economy” and “education” were selected for analysis of their impact on perception of rural quality of life in the area under study.

The main reasons for choosing these seven indices as the theoretical framework of this research are as follows:

Rural house: The index of housing is employed for the quality of rural and urban life in all of the presented models in previous studies. This is due to the fact that rural housing has been linked to the villagers' livelihoods, namely keeping livestock, poultry, and agricultural products warehouse and buildings are the main destination for the nation's power supplies (Mirniazmandan and Rahimianzarif, 2018). These issues are the basic reasons for the importance of this index in studying the quality of life.

Recreation: According to the lack of urban recreations in rural areas and considering that the leisure time variables in the villages are traditional, it can be stated that the index of recreation can play a considerable role in determining the quality of the villagers' life (Aram, Solgi and Holden, 2019).

Health: Due to the small population of villages in Iran, there are no health centers in most of these villages, and if these centers exist, they do not have the necessary equipment and infrastructures. Therefore, it seems that this index can affect the villagers' quality of life to some extent.

Safety and Security: The long distance between residential areas in Iran and the probability of natural disasters are the factors that affect the security and safety of villages in Iran. These issues determine the necessity of buildings structural optimization against earthquake and using safety and security indices in the conceptual model of this research (Mirniazmandan et al, 2018).

Rural Infrastructure: It seems that rural infrastructures including water supply networks, electricity, gas, telephone, and rural wastewater collection affect the villagers' objective quality of life.

Rural Economy: The economy similar to housing exist in all quality of life models, including rural and urban spaces, which due to its importance is included in the present model.

Education: Education is one of the most important criteria in the process of idea training (Rahimianzarif and Moradi, 2018). The quality of education in villages can play a significant role in promoting and updating the lifestyle of villagers, which seems to affect their quality of life.

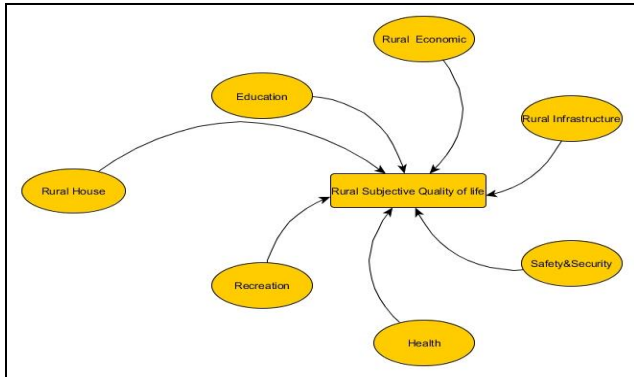


Figure 3. A conceptual model of the factors affecting rural quality of life (Authors).

Analysis of rural quality of life in the area under study by the conceptual model of the research

Considering the goal of this research, the five villages of Oshtoran, Varkaneh, Habashi, Gashani and Heydareh Ghazikhan in Hamadan Province were selected as the case for study. The distinctive characteristic of these villages is the high number of service and construction projects implemented in them during the past two decades because of their valuable texture and numerous capacities. Indeed, valuable contexts plays important role for making a vital spaces in both urban and rural ares (Khanian et al., 2013).

In fact, these five villages were selected by the Cultural Heritage Organization of Hamedan Province as the sample villages due to the valuable texture and the local style of habitation. This selection has led to several activities in these villages, which are done by governmental organizations to improve the objective quality of life. Regarding the fact that comparing the quality of objective and subjective life is the topic of this study, these villages can be suitable samples.

The descriptions and the images of these villages are presented as follows:

Oshtoran is a village in Khorram Rud Rural District located in the Central District of Tuyserkan County, Hamadan Province. Khorram Rud was one of the secondary roads, which was connected to the Silk Road. At the end of this way, merchants had to unload in the current place of Oshtoran village for passing the Alvand Mountain, and after resting and reviving, they used domestic animals for carrying their loads. This place has always been a place for unloading and loading as the current terminals. The documents and stone engravings in Kofi language, located in the village’s mosque, are the evidence for the village's rich history.

Varkaneh village in Hamadan has been entered in the list of national heritage and is considered as the special touristic area of Iran. Varkaneh village is unique for using vernacular and local materials, especially the stony material that its popularity is apparent in the face of the village. The history of Varkaneh village goes back to more than 400 years. Its first and oldest neighborhood is Darb Masjed.

Habashi is one of the villages of the tourism destination in Hamedan province that is situated 26 km west of Asadabad. Its stepped texture at the foot of Mount Zarileh, the highest mountain of the region, has created a spectacular landscape. Cultural heritage experts attribute this village to Medes era due to the similarities between the structure of vernacular stone and adobe architecture and the historical remains of this era. The major part of the tourist attractions of the Habashi village is its natural landscape. Vast gardens, grasslands, springs and the hillsides of the surrounding mountains are among the beautiful promenades of the village. Habashi weather is mild in the spring and summer, cold in autumn and winter. In the spring, mountains around the village are covered with the various wilding plants.

The village of Gashani is located 17 km northwest of Tuyserkan city in Hamedan province. The unique nature of Gashani with its stepping houses and historical texture have attracted many tourists. The suitable climatic conditions and rainfall throughout the year have created many springs in this village, which are the sources for irrigation of trees and pastures in this area.

The village of Heydareh Ghazikhan is one of the most beautiful and touristy villages in Hamedan province with 180 families and a population of 730 people. It is located 35 km away from the provincial capital, Hamedan city. Most of the people in this village are farmers and ranchers. The village of Heydareh Ghazikhan has several high mountains which the most famous one is “Daem Barf”. It is covered with snow in most months and the snow usually lasts until the late June and early July. “Daem Barf” mountain hosts many climbers and tourists every year. Figure 4 indicate the general physical conditions of these villages.



Figure 4. Oshtoran village.



Figure 5. Varkaneh village.



Figure 6. Habashi village.



Figure 7. Gashani village.



Figure 8. Heydareh Ghazikhan village.

A 44-item questionnaire (Appendix 1) was created with regard to each variable based on the conceptual model of the research. The questions were asked in layman's terms to be as much understandable by everyone as possible.

Regarding the population of these villages, Cluster sampling model was used for choosing samples, in a way that 5 percent of the each village's population was selected as the research sample that resulted in 200 questionnaires.

Considering the compatibility of the conceptual model with structural equation modeling and considering the size of the sample (200), the SmartPLS software was used for data analysis. The collected data were entered into SmartPLS upon being prepared by the SPSS 19 software and measurement of the reliability of the questions (0.856), and then the required analyses were performed.

Structural equation modeling (SEM) is a general and reliable multivariate analysis technique in the multivariate regression family, or more specifically an extension of the general linear model. This technique allows for simultaneous testing of regression equations. It is a comprehensive approach to testing hypotheses about the relationship between observable and latent variables. The terms "covariance structure analysis", "causal modeling" and "linear structural relations (LISREL)" are also used to refer to this technique but it is commonly known as structural equation modeling (Santoso, 2007).

The conceptual model of the research was analyzed by structural equation modeling and the SmartPLS software. The partial least squares method is one of the commonly used techniques in social and psychological studies. Since its introduction back in 1982 by Karl Jöreskog, covariance-based structural equation modeling has gained much attention in empirical research. However, the popularity of LISREL, which is currently the most well-known tool for performing such analyses, is rooted in the fact that not all researchers are familiar with the techniques which can replace structural equation modeling such as partial least squares.

In order to analyze the impact of the indices under study in the selected area by structural equation modeling, "rural infrastructure", "education", "recreation", "rural house", "safety and security", "rural economy" and "health" were selected as latent factors. The finalized model of the research has been presented in Chart. 1.

The validity of the indices used in the questionnaire was measured by the convergent validity criterion, which is used specifically in structural equation modeling. The average variance extracted (AVE) technique was used for assessment of convergent validity. The results have been presented in Table 1. The cutoff point for acceptability of AVE is 0.5 (Hulland, 1999). As it can be seen in the above table, all values are above 0.5 which indicates that the convergent validity of the research model is acceptable. The next step was measuring the coefficients of the paths between latent factors. The results have been presented in Chart. 2.

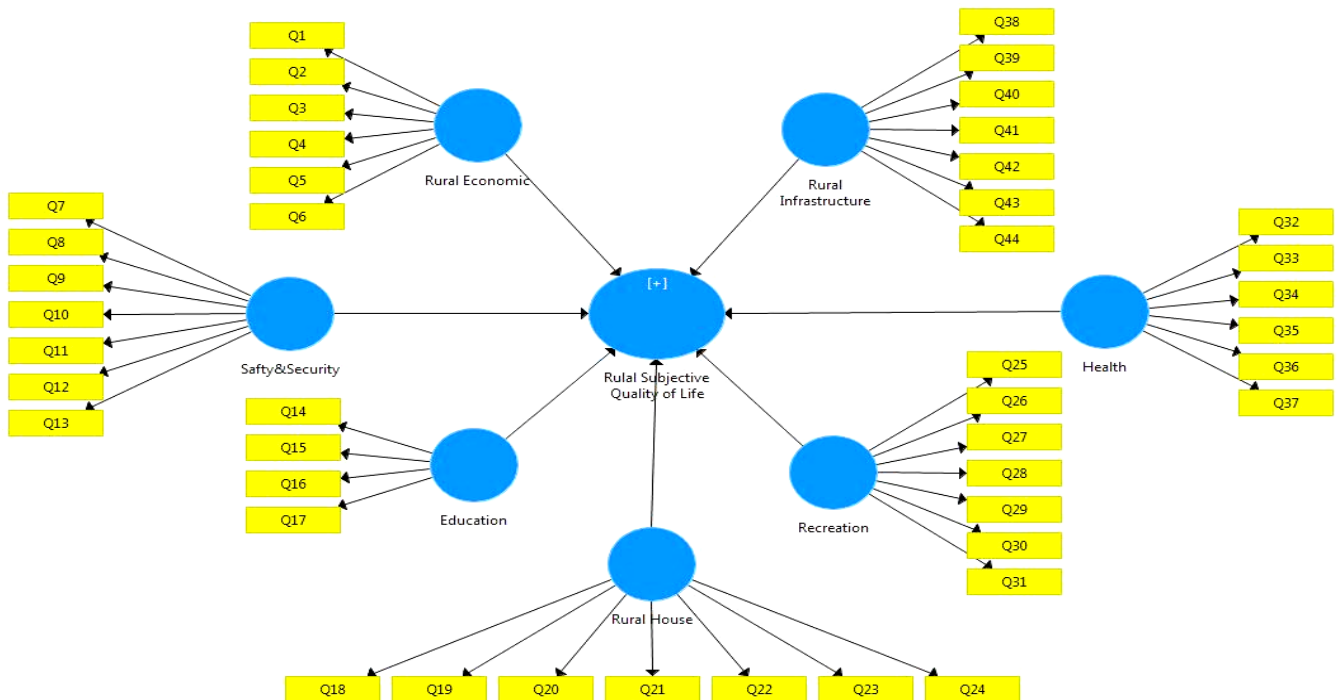


Chart. 1. Structural model of the research.

Table 1. Results of AVE for the research variables.

Variable	Rural Infrastructure	Education	Recreation	Rural House	Safety and Security	Rural Economy	Health
AVE	0.508	0.588	0.737	0.683	0.632	0.587	0.507

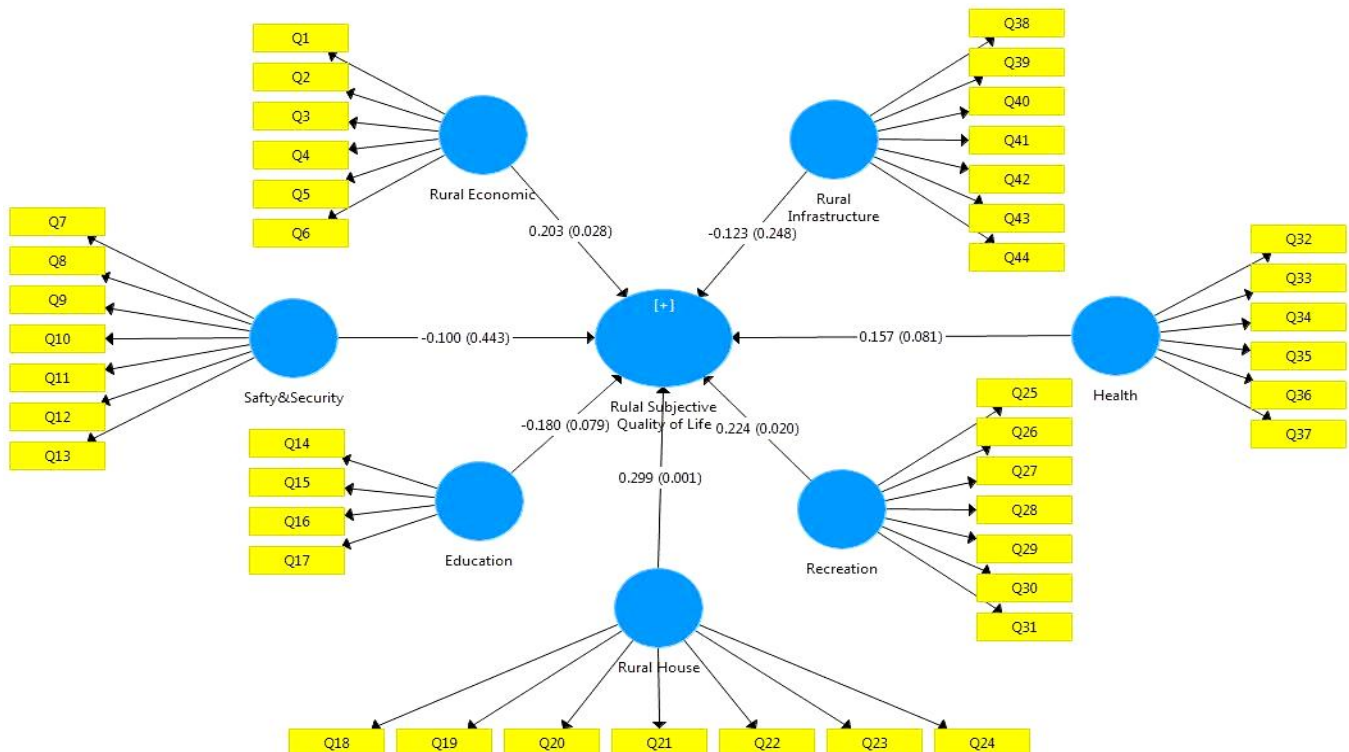


Chart. 3. Structural equation modeling with regard to path coefficients and significance level values.

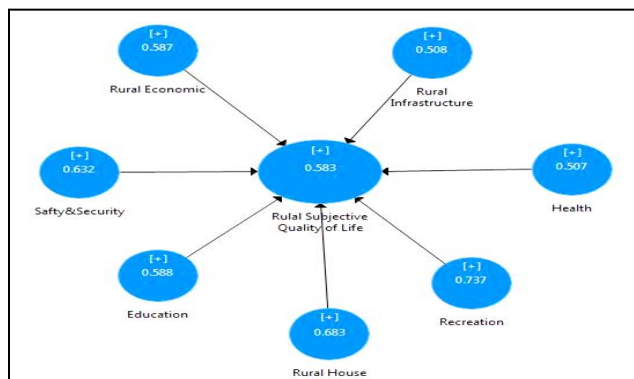


Chart. 2. Validity of the research model.

Table 2. Path analysis.

Hypothesis	Sig	Path Coefficient	Path
Reject	0.248	-0.123	Rural Infrastructure → Rural Subjective Quality of Life
Reject	0.079	-0.180	Education → Rural Subjective Quality of Life
Accept	0.020	0.224	Recreation → Rural Subjective Quality of Life
Accept	0.001	0.299	Rural House → Rural Subjective Quality of Life
Reject	0.433	-0.100	Safety and Security → Rural Subjective Quality of Life
Accept	0.028	0.203	Rural Economy → Rural Subjective Quality of Life
Reject	0.081	0.157	Health → Rural Subjective Quality of Life

CONCLUSION AND DISCUSSION

Nowadays quality of life has become an important tool for evaluation of livability in urban and rural settlements. Overall, this concept is categorized into two aspects: objective and subjective. As it was said before, objective quality of life refers to the amenities and infrastructures of a settlement which provide a certain degree of welfare for the residents. Subjective quality of life, on the other hand, refers to the residents’ perception of the amenities and the existing conditions of that settlement. Because of the absence of many welfare indices in rural regions on the one hand and important identity aspects and strong place attachment among the residents of these regions on the other hand, their objective quality of life and subjective quality of life are intertwined in a complicated manner (Khanian et al., 2018). Lack of correct understanding of this complex mechanism may impede all attempts to improve mental well-being and happiness in rural residents and consequently trigger migration to cities (Gheitarani et al, 2019).

In this regard, the present research was conducted with the aim of analyzing the impacts of service provision and construction projects in Iranian villages on perception of rural quality of life. For this purpose, first, the various factors of quality of life were determined by reviewing the related literature and then a conceptual model of perception of rural quality of life was created. The model is based on seven indices: rural house, recreation, education, rural economy, safety and security, rural health

and rural infrastructure. As it can be seen in Chart 3, the coefficients are significant in three paths.

Table 2 indicates the results of path analysis for testing the research hypotheses. Considering that the significance values for three hypotheses are less than the chosen threshold (0.05) and the path coefficients are positive, it can be concluded that only three hypotheses proposed in the conceptual model of the research, each of which includes a separate path, are acceptable and have a direct relationship with one another. These three paths are as follows (Table 2):

and rural infrastructure. A 44-item questionnaire (Appendix 1) was made with regard to these seven indices and was distributed among the residents of Oshtoran, Varkaneh, Habashi, Gashani and Heydareh Ghazikhan villages in Hamadan Province. The reason for selecting these five villages is the high number of service and construction projects implemented in them because of their value.

The results of this study indicate that perception of rural quality of life in the villages under study is heavily influenced by the rural house, rural economy and recreation indices. In other words, any positive change in these three indices will result in improvement of mental well-being and happiness in the villagers. No significant relationship was observed between the other four indices and perception of quality of life in the area under study.

In addition, a review of the services provided and the construction projects implemented in these villages indicates that providing housing facilities and organizing residential constructions have had an important role in improving the perception of welfare and quality of life among the residents. It seems that this factor has decreased the rate of migration to the adjacent cities and has acted as a pull factor for the rural population. Overall, the subjective impact of the rural house was evaluated as positive.

While rural economy and recreation were identified as influential factors in perception of quality of life in the villages under study, they had a negative impact and acted as a push factor because of the inverse relationship. It

seems that the mechanism of perception of quality of life in these villages works in this particular way: if the factor of rural house outweighs the other two factors, there will be less migration otherwise the rate of migration to adjacent cities will increase.

Considering the findings of this study, it can be concluded that paying due attention to the concept of place, both at the private scale (houses) and the public scale (recreation) has had a significant role in improving the subjective quality of life in the areas under study. In general, the sense of happiness of the villagers seems to be dependent on such concepts as place and place identity while service provision and construction projects have been driven by the concept of place making.

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APPENDIX 1

Dear Villager

This questionnaire is designed to conduct a research project to assess the quality of life in the villages of Hamedan province. Given the fact that the results of the questionnaire will be used to transfer your views to the authorities and managers, please answer the following questions carefully.

This questionnaire will take you up to 10 minutes. Please check the answers to the questions in the appropriate place. Thanks in advance for your cooperation.

Questionnaire Code: _____

Respondent: _____

Date: _____

How satisfied are you with the residential situation?					
The Level of satisfaction with the size of your residential unit	Very low	Low	Middle	High	Very High
The level of satisfaction of the type of construction and design of your own housing	Very low	Low	Middle	High	Very High
The degree of satisfaction of the facilities and facilities of your residential unit (heating and cooling)	Very low	Low	Middle	High	Very High
The degree of satisfaction with the quality of renovation and the strength of your residential unit	Very low	Low	Middle	High	Very High
The degree of satisfaction of neighborly relations in your place of residence	Very low	Low	Middle	High	Very High
The degree of satisfaction with the facilities and government support for building housing	Very low	Low	Middle	High	Very High
Overall, how satisfied are you with your housing situation?	Very low	Low	Middle	High	Very High

How satisfied are you with the education situation?					
Satisfaction of the quality of schools in your village	Very low	Low	Middle	High	Very High

Satisfaction with access to educational centers in your village	Very low	Low	Middle	High	Very High
Satisfaction level of job training and the degree of training compliance with your job	Very low	Low	Middle	High	Very High
Overall, how satisfied are you with your education's feature?	Very low	Low	Middle	High	Very High

How satisfied are you with the status of facilities, equipment, facilities and services in the countryside? (infrastructures)

Satisfaction with access to drinking water	Very low	Low	Middle	High	Very High
Satisfaction with the access to electricity	Very low	Low	Middle	High	Very High
Satisfaction of access to phone and mobile phone	Very low	Low	Middle	High	Very High
Satisfaction with sewage system	Very low	Low	Middle	High	Very High
Satisfaction with access to supply and sale centers for daily needs (bakery, groceries, vegetables and, fruits)	Very low	Low	Middle	High	Very High
Satisfaction rate of lighting and light of streets and rural spaces	Very low	Low	Middle	High	Very High
Overall, how satisfied are you with the status of rural amenities and services?	Very low	Low	Middle	High	Very High

How satisfied are you with the employment situation and economic conditions?

Satisfaction level of your income	Very low	Low	Middle	High	Very High
Satisfaction of your living expenses	Very low	Low	Middle	High	Very High
Satisfaction with your occupational safety status	Very low	Low	Middle	High	Very High
Satisfaction with the number of hours worked per week	Very low	Low	Middle	High	Very High
Satisfaction level of employment at the village level	Very low	Low	Middle	High	Very High
Overall, how satisfied are you with employment status and economic conditions?	Very low	Low	Middle	High	Very High

How satisfied are you with the recreation?

Satisfaction rate of the number of recreation centers in your village	Very low	Low	Middle	High	Very High
The degree of satisfaction with the situation and the possibilities of open-air rural areas for spending leisure time in your village	Very low	Low	Middle	High	Very High
The degree of satisfaction with sport facilities and services in the village	Very low	Low	Middle	High	Very High
The degree of satisfaction with social entrainment in your villages public spaces	Very low	Low	Middle	High	Very High
The degree of satisfaction with restaurant and café in your villages	Very low	Low	Middle	High	Very High
The degree of satisfaction with green spaces	Very low	Low	Middle	High	Very High
Overall, how satisfied are you with the entertainment facilities in your village?	Very low	Low	Middle	High	Very High

To what extent are you satisfied with the health conditions?

The degree of satisfaction with existing health and medical care (social security, ...)	Very low	Low	Middle	High	Very High
Satisfaction rate of health care costs	Very low	Low	Middle	High	Very High
Satisfaction with access to health Centers	Very low	Low	Middle	High	Very High
The degree of satisfaction with access to a specialist physician?	Very low	Low	Middle	High	Very High
Satisfaction with your mental health, happiness	Very low	Low	Middle	High	Very High
Overall, how satisfied are you with your health?	Very low	Low	Middle	High	Very High

To what extent are you satisfied with the security and safety situation?

Satisfaction with security related to crime (addiction, street harassment, theft, etc.) in your village	Very low	Low	Middle	High	Very High
The degree of satisfaction with the safety of women and children in your village	Very low	Low	Middle	High	Very High
The degree of satisfaction with the safety of old age people in your village	Very low	Low	Middle	High	Very High

The degree of satisfaction with the performance of security and police centers	Very low	Low	Middle	High	Very High
Satisfaction with safety of road and street traffic accidents	Very low	Low	Middle	High	Very High
Satisfaction with safety from earthquake and natural disasters	Very low	Low	Middle	High	Very High
Overall, how satisfied are you with your safety and security situation?	Very low	Low	Middle	High	Very High

Overall satisfaction of life

In general, and with all the previous questions, how satisfied are you with your life in your village?	Very low	Low	Middle	High	Very High
Overall, what has changed the quality of your life over the past four years?	Very low	Low	Middle	High	Very High
How much do you expect your life to be better in the future?	Very low	Low	Middle	High	Very High

Personal Characteristics

Marital status:	Gender:	Age:	Village:
Work place	Housing ownership status:		
What is the approximate area of your property?			
Education level:			