Effects of Tourism on Subjective Dimensions of Quality of Life: The Case of Tourist Destination Villages of Marvdasht County

Neda Aliyari [a] , Ayatollah Karami [b,] and Maryam Sharifzadeh [c]*

Abstract

This research aimed at investigating the impacts of tourism on residents' subjective quality of life in tourist destination villages of Marvdasht County, Iran. The statistical population included 170 heads of households living in the tourist destination villages of Marvdasht County, selected by the simple randomization method and based on Cochran's formula. The data collection instrument was a researcher-made questionnaire whose validity and reliability were confirmed. Data were analyzed by exploratory factor analysis and Morris's model. The results of factor analysis showed that the components including cost, local livelihood, and asset accounted for 61.27, 58.77, and 58.06 percent of the total variance in the economic dimension of subjective quality of life, respectively. Social dimension components (including local community and nutrition and health) also captured 66.17 and 60.48 percent and environmental dimension components (including environmental sustainability and physical dimensions) captured 61.28 and 67.87 percent of the total variance in residents' subjective quality of life, respectively. According to the findings, the level of subjective quality of life was medium (with the coefficient of 0.55) based on the Morris method. While the economic (with a coefficient of 0.53) and environmental (with a coefficient of 0.54) dimensions of subjective quality of life were at the medium level, the social dimensions of subjective quality of life (with a coefficient of 0.6) were at the favorable level. Therefore, the highest score of the subjective quality of life in the tourist destination villages was related to the social index. These findings can be used to identify previous policy strategies and design future planning policies.

[a] *Ph.D. Student of Agricultural Development, Department of Rural Development Management, Faculty of Agriculture, Yasouj University, Yasouj, Iran*
[b] *Associate Professor of Agricultural Economics, Department of Rural Development Management, Faculty of Agriculture, Yasouj University, Yasouj, Iran*
[c] *IAssociate Professor of Department of Rural Development Management, Faculty of Agriculture, Yasouj University, Yasouj, Iran*

* Corresponding author's email: ayatkarami@yu.ac.ir

INTRODUCTION

The tourism perspective is very promising since it is known as the development passage and is often applied as the key to economic growth (Babakhanzadeh, 2013; Soltani et al., 2014). The tourism industry has come to be known as the leading and largest industry in the 21st century (Manouchehri & Manouchehri, 2014). This industry has the highest capacity for creating jobs and economic development, especially in rural areas since employment in this industry requires little physical capital and the local residents with even simple skills can also work in this area (Khosrowjerdi & Nooripoor, 2017). One of the recent branches in the tourism section is rural tourism, which is a form of nature-based tourism that reveals rural life, culture, art, and heritage in rural areas and focuses on the communities and economics of local communities (Gadad & Kamashetty, 2014). Therefore, the tourism industry is considered to be a contributing industry to balanced development (pro-poor development) (Babaei-Semiromi et al., 2014). Iran is among the top ten countries in terms of tourist attraction, the fifth in terms of tourism diversity, and among the top three countries in terms of the variety of handicrafts (Kazemi et al., 2015). It is also considered one of the most important tourist hubs in the world due to its cultural, natural, and climatic backgrounds (Sharifi-Renani et al., 2009) and has a unique position in this industry (Ghahremanzadeh et al., 2013). This is definitely beneficial for the country and nowadays it has an enormous impact on the local economy (Gadad & Kamashetty, 2014). The importance of this industry lies in the fact that by the proper use of natural and human resources, it will allow attaining economic growth, producing local handicrafts, and taking effective steps towards improving the environmental conditions and safeguarding cultural heritage and local customs and traditions in the villages (Khosrowjerdi & Nooripoor, 2017). Given the unique impacts of tourism on local communities, it is not surprising that quality of life

has attracted the growing attention of tourism researchers (Ouyang et al., 2019).

Quality of life is a global phenomenon that has become one of the most important concerns in the 21st century in both developing and developed countries (Rahimianzarif et al., 2020; Zanganeh-Shahraki et al., 2020). Regarding the importance of the issue and the lack of scientific research carried out, the quality of life in rural areas is of great importance (Badri et al., 2013). Researchers from different disciplines have studied quality of life since the 1930s (Lee, 2008; Samadi-Ahari & Sattarzadeh, 2019; Ulengin et al., 2001). Quality of life is an interdisciplinary issue and a complex, multidimensional, and dynamic concept (Cho et al., 2021; Kafashpor et al., 2018; Rahimianzarif et al., 2020; Samadi-Ahari & Sattarzadeh, 2019; Taghilou et al., 2019; Thuong & Anh, 2018), which consists of material (e.g., income) and non-material parameters (e.g., health, employment, personal and family life, social support, stress, and environment) (Kafashpor et al., 2018). Despite it has been studied by geographers and others for decades, there is still no single definition or standard method for measuring quality of life (Samadi-Ahari & Sattarzadeh, 2019; Thuong & Anh, 2018). Nonetheless, researchers often apply objective and subjective indicators to measure quality of life (Chen et al., 2020; Honarkhah et al., 2020; Rahimianzarif et al., 2020; Samadi-Ahari & Sattarzadeh, 2019; Thuong & Anh, 2018). Objective indicators are measurable economic and social dimensions reflecting the extent to which human needs are being met over time. These criteria are acquired through reports, official statistics, and secondary data and demonstrate the obvious and tangible life conditions of people (Chen et al., 2020; Honarkhah et al., 2020; Liu et al., 2020; Macke et al., 2018; Rahimianzarif et al., 2020; Taghilou et al., 2019; Thuong & Anh, 2018). There are various criticisms against such methods within quality of life research. According to Lee (2008), quality of life studies should be assessed by subjective approach and people

International Journal of Agricultural Management and Development, 12(1), 43-62, March 2022.

44

should be asked directly about their life conditions since objective quality of life may not accurately reflect people's perception whereas subjective indicators illustrate more valuable information about people's perception (Thuong & Anh, 2018). They believe that without an individual's subjective assessment of the situation, it will impossible to attain a perfect picture of his or her quality of life (even with a comprehensive set of objective actions) (Chancellor et al., 2011).

Subjective indicators are usually assessed at the local and regional level (individual level), and in-depth methodologies are applied to obtain information directly from individuals. On the contrary, objective indicators are typically implemented cross-culturally at the international and national levels and typically employ a wide range of data acquired by statistical reports and from administrative sources (Macke et al., 2018; Mohammadrezaei et al., 2020; Samadi-Ahari & Sattarzadeh, 2019; Thuong & Anh, 2018). Quality of life is, therefore, a multidimensional criterion with economic, political, environmental, social, and personal aspects (Honarkhah et al., 2020; Thuong & Anh, 2018). It has also been defined by Ferrans and Power as subjective wellbeing perceived by each person across physical, mental, and socioeconomic domains (Cho et al., 2021). According to the quality of life researchers, subjective indicators are more effective than objective indicators in providing explanations (Honarkhah et al., 2020). Considering these arguments, subjective indicators suggest a perspective beyond objective indicators of quality of life (Macke et al., 2018).

In this regard, researchers have tried to identify the components of quality of life. One of the main reasons for such interest is hidden in the effective allocation of rare resources. This can be achieved by using the results of the related research. Such studies are a tool to make appropriate policies. These recommendations are critical to policymakers (Ulengin et al., 2001).

Subjective indicators are defined as a person's cognitive and emotional assessment of his or her life. The first component is emotional, which refers to the extent of a person's feelings (general satisfaction) about life conditions and is measured using intuitive or logical responses. This component can be divided into positive feelings if it is pleasant and negative ones if it is unpleasant (Chen et al., 2020; Fahmi & Sari, 2020; Honarkhah et al., 2020; Poudyal et al., 2019; Samadi-Ahari & Sattarzadeh, 2019; Yolal et al., 2016). The next component is the cognitive component, which usually refers to life satisfaction in general or satisfaction with various aspects of life such as income, work, and relationships (Chen et al., 2020; Fahmi & Sari, 2020; Honarkhah et al., 2020; Poudyal et al., 2019; Rahimianzarif et al., 2020; Samadi-Ahari & Sattarzadeh, 2019; Yolal et al., 2016). It is measured by the degree of satisfaction or dissatisfaction with various aspects of life (perceived life conditions) (Chi et al., 2017; Macke et al., 2018; Samadi-Ahari & Sattarzadeh, 2019; Taghilou et al., 2019; Thuong & Anh, 2018). These criteria are based on individuals' reports of life perception and show people's perception and assessment of their objective life situation (Fu et al., 2020; Honarkhah et al., 2020; Taghilou et al., 2019). In this study, the subjective quality of life is defined as an individual assessment of life satisfaction. Residents' involvement in quality of life research and information provided on the satisfaction with various aspects of life can be treated as a useful tool in identifying and creating policies in the long run. Subjective measures of perception, assessment, and life satisfaction or objective indicators of the urban and rural environment are commonly employed to measure quality of life. Although a tangible condition of the environment is usually favored by the objective approach, personal assessment of objective life conditions is preferred by the subjective approach (Thuong & Anh, 2018).
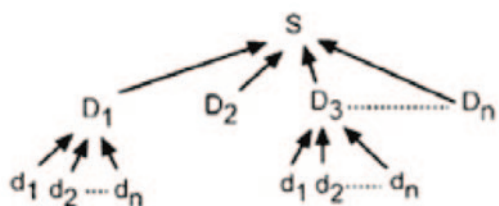
Figure 1. The Simplest Structural Model of QoL.

S = life satisfaction/well-being, D = domain satisfaction, d = sub-domain satisfaction (Samadi-Ahari & Sattarzadeh, 2019).

Types of rural tourism include ecotourism, historical-cultural tourism, nature-based tourism, green tourism, agritourism, indigenous tourism, and village tourism (Afshari-Azad et al., 2014). In the meantime, cultural-historical monuments in rural areas, which have a special place as cultural heritage (Mahdavi et al., 2016), are considered major tourist attractions and has the largest contribution to tourism development (Adabi Mamaqani et al., 2014). According to the literature review, tourism has often led to improvements in residents' quality of life in tourist destinations (Carneiro & Eusébio, 2015). However, little research has been carried out in this area (Carneiro & Eusébio, 2015; Lee, 2008), and research documented on it has been rare in the Asian region (Lee, 2008). There is also a paucity of data about the quality of life in Iran (Samadi-Ahari & Sattarzadeh, 2019).

Marvdasht County is located in a special geographic area with abundant natural, historical, and cultural attractions (Bahramian & Shamsoddini, 2018; Shams et al., 2015). It is one of the agricultural and industrial hubs of Fars Province, which accommodate a large number of rural populations. Also, due to its ancient background and historical monuments, it is considered the tourism hub of the country and the province (Barghi & Aslani, 2018). As a result, a large number of tourists from different regions and with different cultures are in close contact with rural people every year and cause many changes in various economic, social, cultural, and environmental dimensions, thereby affecting the residents' quality of life (Ghadami et al.,

2011). In addition, this county has a large contribution to livestock and agricultural products in Fars province while the migration of the rural population has increased in recent years due to the decline in agricultural production in this region (Shakour et al., 2014). The rural population's migration due to the low level of life in rural areas has posed numerous social, economic, and environmental issues (Sojasi-Qeidari et al., 2015).

There are various theories and frameworks for discussing tourism activities and quality of life. Social exchange theory, social representations theory, and bottom-up spillover theory are the most important theoretical frameworks in this regard (Matatolu, 2019). The present study applied the bottom-up spillover theoretical framework. This theory explains that the overall quality of life is at the top of the hierarchy. Specific domains of life (e.g. leisure, social life, family, etc.) are placed in the middle, and the events inside each domain of life are at the bottom of the hierarchy (Li et al., 2020). This theory holds that effects within a specific life domain accumulate and vertically spill over super-ordinate domains (Li et al., 2020; Matatolu, 2019).

In other words, life satisfaction is seen at the top of the hierarchy of attitudes (or satisfaction), which is influenced by satisfaction with domains of life. In turn, satisfaction with a particular domain of life is affected by lower levels of life concerns within that domain. Consequently, according to this theory, the prerequisite for overall life satisfaction is satisfaction with different domains and sub-domains of life (Kim et al., 2020; Matatolu, 2019; Sirgy, 2019; Steenholdt & Chimirri, 2018). For instance, dissatisfaction with income or community can spill over other domains and ultimately affect the overall quality of life (Steenholdt & Chimirri, 2018). On the other hand, to understand the impacts of tourism perceived by the residents of the host community, several frameworks are used. These frameworks include tourist area life cycle, social exchange theory (SET), stakeholder theory, social representation theory,

growth machine theory, emotional solidarity, and community attachment theory (Rasooli-manesh & Seyfi, 2020). The local community's quality of life is related to the various stages of the life cycle tourism model. This theory is generally based on the capacity of social tolerance. Therefore, it is believed that tourism causes positive changes in the local residents' quality of life during the initial stages of development. Nevertheless, the change tolerance capacity of the community reaches its threshold over time after which tourism development starts to make negative changes and as a result, reduces the host community's quality of life (Ghadami et al., 2011). Considering the significant contribution of tourists in this area, it is necessary to study the tourism impacts on the residents' quality of life. This requires research on its positive and negative impacts on the villagers' quality of life. If tourism is left uncontrolled, it will not only degrade the environment but also destroy the cultural and identical foundations of local communities (Ziaei & Torabian, 2011). Therefore, this research investigated the impacts of historical-cultural tourism on the economic, social, and environmental dimensions of quality of life in rural areas of Marvdasht County since understanding the impacts of tourism on the subjective quality of life can assist the authorities to design programs and create mechanisms to reduce the negative impacts and strengthen the positive impacts, thereby improving the residents' quality of life.

One of the most important approaches to assess tourism impact on quality of life is the mental approach (Aref, 2011). A few studies have specifically addressed the impacts of tourism on quality of life (Yang et al., 2017). However, residents are one of the most important tourist resources of an area, and this influences tourism development. Analyzing the impact of tourism on the quality of life is of utmost relevance (Carneiro et al., 2017). Quality of life is a subjective notion (D'Agostini & Fantini, 2008) determined by the individual's mental judgment of living conditions

(Moons et al., 2006). Satisfaction is considered an acceptable and realistic goal for policy-makers (Lee, 2008) and has played a central role in political and academic discourse in recent years (Carneiro et al., 2017). An understanding of residents' subjective well-being is vital to both community leaders and tourism policymakers. Such knowledge helps them make policies that minimize the negative impacts and maximize the benefits of tourism development. The sustainability of a development plan roughly depends on community organizations actively attempting to control and shape residents' subjective well-being (Chi et al., 2017). In this regard, Ghadami et al. (2011) showed that tourism had a negative effect on the dimensions including hygiene and environment, as well as health and security. MohammadPourjaberi (2016) also applied subjective indicators to analyze the role of tourism on the citizens' quality of life in Shemiranat County. The results of his research indicated that the citizens' quality of life was improved by tourism development. This improvement was not the same among different realms of quality of life and there is a significant difference between them. In addition, according to the results, among all the studied indicators, the index of recreation and leisure time has the most impact on the residents' viewpoint. Qaedi (2014) showed that tourism had both positive and negative environmental impacts on people's life. Regarding the quality of tourism destinations and the subjective well-being of residents, Lipovcan et al. (2014) studied the subjective well-being of residents in tourism destinations. The findings showed that the residents of destinations with the higher evaluated quality of tourist offer were more happy and satisfied with their lives. In an effort to measure the subjective quality of life, Sorés and Peto (2015) found out that tourism improved not only the life quality of tourists in the region but also the health condition of the local population. However, it caused inflation. The touristic reputation of the town increased prices by about 15-20 percent than

other neighboring settlements and definitely caused problems for local inhabitants, and this was effective in the individuals' assessment of their satisfaction with their lives. Chi et al. (2017) studied the factors influencing residents' subjective well-being at World Heritage Sites. The results showed that residents with higher economic status, sense of community, and social environment generally had higher subjective well-being.

On the other hand, the results of research by Yang et al. (2017) on tourism impacts on quality of life in Hong Kong revealed that those impacts seemed to be insignificant. Kolawole et al. (2017) indicated that there was a significant positive relationship between tourism socio-cultural impacts and the community people's quality of life, which meant that people's quality of life in that region was influenced by the socio-cultural benefits perceived from tourism in their community. Based on a study by Campón-Cerro et al. (2017), residents' perceived quality of life seemed to support further tourism (Campón-Cerro et al., 2017) since the sustainable success of tourism development is only probably achievable when residents have high subjective well-being and are willing to support tourism (Chi et al., 2017).

This literature review indicates that researchers have attempted to investigate their study areas on the basis of the quality of life indicators they have designed. Therefore, based on a summary of indicators used by other researchers, the present study examined the impacts of tourism on the subjective quality of life in tourist destination villages of Marvdasht County with a more comprehensive view.

METHODOLOGY

This research was conducted by a combination of descriptive-analytical and survey methods to investigate the impacts of historical-cultural tourism on three subjective dimensions of quality of life (economic, social, and environmental) in rural areas of Marvdasht County. Secondary (library-based) and primary resources were used to collect data based on the field research. To investigate the residents' subjective quality of life, their satisfaction in three dimensions including economic dimension (including three components of cost, local livelihood, and asset), social dimension (including two components of nutrition and health, and local community), and environmental dimension (including two components of physical and sustainability of the environment), as well as the importance of each item from the participant's viewpoint, were studied with a questionnaire based on the five-point Likert scale (ranged from 1 = very low to 5 = very high). To obtain the subjective quality of life, the importance scores were considered as weight.

To assess the respondents' subjective quality of life, and following Andereck and Nyaupane (2011) and Suntikul et al. (2016), we used the development made by Brown et al. (1998) to the method. So, a new score of quality of life (the importance and satisfaction with each aspect of quality of life) was taken into consideration. The research method of Brown et al. (1998) is an interesting tool based on the quality of life importance/satisfaction model provided by the Center for Health Promotion at the University of Toronto (Bertelli et al., 2020). This method was also used by Massam (2002) with some modifications. In Massam's (2002) method, the importance and satisfaction scores of the items are used to determine the quality of life score over a range from -10 to +10. For example, an incredibly important item whose respondent was very satisfied earned a score of 10. If the item was very important and the respondent was completely dissatisfied, the item score was estimated at -10. Then, the items were placed between the two extremes depending on the importance and satisfaction scores (Andereck & Nyaupane, 2011; Massam, 2002; Suntikul et al., 2016; Zhao et al., 2011).

In 2011, Andereck and Nyaupane employed Formula 1 to calculate their quality of life score.

Subjective quality of life = (Importance Score/3) × (Satisfaction Score-3) × 3 + 10 (Andereck & Nyaupane, 2011; Suntikul et al., 2016)

(1)

To facilitate the calculation, the acquired scores were modified from 1 to 20 with no zero or negative scores (Andereck & Nyaupane, 2011; Suntikul et al., 2016).

The statistical population of the study included the heads of households living in tourist destination villages with more than 30 resident households in Marvdasht County, including the three villages of Dashtak, Kondazi, and Faruq. According to the Population and Housing Census (2016), the studied villages have 2269 heads of households (Statistical Center of Iran, 2016). Using Cochran's formula, the number of samples required to complete the questionnaire was calculated to be 170 cases. The simple randomization technique was applied among the heads of households in the sample villages to have an equal chance of selection for each household. Information on the villages studied is presented in Table 1.

Table 1

Population, Number of Households and Sample Size of the Studied Villages

District	Rural District	Village	Population	Number of households	Number of samples
Seyyedan	Khafrak-e Olya	Faruq	5860	1784	95
Dorudzan	Dorudzan	Dashtak	1281	402	45
	Abarj	Kondazi	272	83	30

The main instrument for data collection was a structured and researcher-made questionnaire based on a scientific and theoretical basis whose face validity was confirmed by a panel of experts. To determine its reliability, Cronbach's alpha coefficient was calculated using the data from a pretest conducted outside the study area. The results showed that the alpha coefficient was 0.78 for local livelihood indicator (16 items), 0.8 for cost (28 items), 0.8 for asset (29 items), 0.79 for physical (43 items), 0.75 for environmental sustainability (17 items), 0.89 for local community (37 items), and 0.89 for nutrition and health (32 items) (Table 2). Accordingly, all components were found to be appropriately and acceptably reliable.

RESULTS AND DISCUSSION

The descriptive results showed that the respondents were on average 47.65 years old (with a standard deviation of 11.32). The youngest respondent was 21, and the oldest responsive was 75 years old. The results also showed that most of the respondents (88 ones) (51.8%) had under-diploma education and 82 (48.2%) had over-diploma education. The occupation of 67 (39.4%) of the respondents was related to farming while 71 (41.8%) had non-farming occupations and 32 (18.8%) were engaged in other occupations.

Researchers usually apply factor analysis in the research that has a variety of variables for various reasons to analyze the data more accurately and to reduce the number of variables and make constructs for it (Feizabadi & Maleki, 2016). In this research, due to the large number of the variables studied, exploratory factor analysis was used to determine the coefficients of the components related to the respondents' subjective quality of life in tourist destination villages. The first step is to provide a data matrix, which in-

Table 2

The Studied Indicators and Variables

Components	Factors	Cronbach's alpha
local livelihood	Residents' satisfaction with employment in the production of horticultural products, agronomy, livestock, non-agricultural occupations in the household; people covered by welfare and the Imam Khomeini relief committee; income from horticulture, animal husbandry, tourism, handicrafts, growing vegetables, agronomy, non-agricultural occupations; debt for the purchase of installment goods, household debt to the bank	0.78
Asset	Residents' satisfaction with carpets, wood stoves, stoves, refrigerators, gas heaters, oil heaters, water coolers, televisions, personal computers, cell phones, satellites, radios, cars, motorcycles, non-motorized vehicles (horses, bicycles, etc.), combine, tractor, tiller, water motor, washing machine, water heater, sewing machine, vacuum cleaner, total household (horticultural, agronomy) land, number of household livestock, beehives, poultry farming, commercial land	0.8
Cost	Residents' satisfaction with the cost (picnic and tourism, leisure activities, art activities, sports activities, land preparation, labor, agricultural inputs, housing renovation and repair, water, electricity and gas bills, Internet, telephone and cell phones, transportation services, fuels and lubricants, maintenance and repair of agricultural vehicles, transportation insurance, health and occupational insurance, agricultural and livestock insurance, registration in university, enrollment in schools, jewelry, personal services, clothing and footwear, dentistry, medical equipment, medical services, medicine)	0.8
local community	Residents' satisfaction with interaction with villagers, friends and acquaintances, and informal institutions, activities (family tourism, leisure, rural camps, sports, art), immigration (seasonal for work, abroad, inland, temporary migration to study), use (dialect, cover, music and local food), participation (in elections, village communities, problem-solving), activity in institutions (formal, informal), leaving relationships between family members, sense of responsibility, empathy with residents, divorce among family members, resolution by arbitrating, suicide in the region, firing in the region, people with a criminal record, fatal accidents, financial accidents, library, local games, art and historical exhibits, enrollment in extracurricular classes, the presence of educated people in the family, literate people	0.89
nutrition and health	Residents' satisfaction with the consumption of white meat, red meat, birds' eggs, nuts, cigarettes, tobacco, beverages, pastes, jams and pickles, soups and salads, tea, sugar, fruits, vegetables, cucurbits, legumes, curd, yogurt, cheese, ice cream, milk, bread, rice, pasta, wheat and barley, olive oil, butter, vegetable oil, snacks, vitamins, minerals, canned food, fast food	0.89
environmental sustainability	Residents' satisfaction with water resources including river and spring, groundwater resources, use of green manure, natural pest control (drought, human-animal conflict, improper use of resources, encroachment at heritage sites), historical and cultural monuments, natural landscapes of the village, indiscriminate construction, pest and crop damage, garden construction system, sewage and wastewater, congestion in the village, collection and disposal of waste, variety of cultivars	0.75
Physical	Use of piped water, electricity, gas supply, Internet, telephone, distance to the primary school, access to the parking lot, road (main, internal), distance to the gas station, building age, number of rooms, lighting, material (ceiling, floor), exterior of the building, type of building skeleton, off-road vehicles, distance to checkpoints, and fire station, holy places, mosque, access to pharmacy, hospital, doctor, nurse, health workers, and dentistry, access to bakery, supermarkets, bank, butcher, distance to high school, middle school, access to the sports field, park, and gym, access to processing workshop, suitable advertising for marketing, product demand, and access to ATMs, tours, eco-lodges, and catering services	0.79

Source: (Ajza-Shokouhi et al., 2013; Akbarian-Ronizi & Shaykh-Baygloo, 2015; Alibigy & Ghasemi, 2016; Al-izadeh et al., 2013; Anabestani & Mahmoodi, 2016; Bandarabad & Ahmadinezhad, 2014; Farahani et al., 2019; Ghadami et al., 2011; Ghadiri-Masoum et al., 2014; Hosseini & Bagherian, 2015; Huttasin, 2008; Jalali et al., 2016; Karkehabadi, 2017; Khajeshahkohi & Minaei, 2014; Lee, 2008; Mirlotfi & Mollanoroozi, 2013; Mohit, 2013; Pourtaheri et al., 2011; Rezvani et al., 2012; Samadi-Ahari & Sattarzadeh, 2019; Sampaio et al., 2013; Shah-Hosseini & Tavakkoli, 2014; Shahrokhi-Sardoo et al., 2016; Sheikhzadeh, 2016; Sojasi-Qeidari, 2016; Taghilou et al., 2019; Tayebnia et al., 2016; Thuong & Anh, 2018; Vedaye-kheiry & Rezayi, 2017)

cludes a table whose columns are the variables and whose rows include the studied subjects. Regarding the abundance of the studied variables related to quality of life, based on previous studies these variables were separately investigated in seven components: physical, nutrition and health, local community, local livelihood, environmental

sustainability, asset, and cost. First, the Kaiser–Meyer–Olkin (KMO) test and Bartlett's test of sphericity were used to test the appropriateness of the collected data. Bartlett's test of sphericity was significant at the 1 percent level, implying the suitability of data for factor analysis.

Table 3
KMO Test and Bartlett's Test of Sphericity

Dimensions	Component	KMO value	Bartlett value	Degrees of freedom	Sig.
Social subjective dimension	Local community	0.722	2673.003	666	0.001
	Nutrition and health	0.68	1323.321	496	0.001
Environmental subjective dimension	Environmental sustainability	0.734	791.203	136	0.001
	Physical	0.873	4067.737	903	0.001
	Asset	0.841	1633.346	406	0.001
Economic subjective dimension	Cost	0.777	1216.048	325	0.001
	Local livelihood	0.758	588.528	120	0.001

The matrix of correlation coefficients was calculated for each of the indices, which is not shown here because of the large size of the data. In the next step, the common components and the relative importance of each variable were determined using the component matrix. Then, the Kaiser criterion was applied to extract the components, and those with an eigenvalue of greater than one were selected. Afterward, the varimax rotation method was used to increase the interpretability and theoretical significance of the components and to achieve an optimal state and simple structure (Feizabadi & Maleki, 2016). Table 4 shows the eigenvalues, variance percentage, and cumulative variance percentage of the extracted factors. After varimax rotation and the removal of ineffective items, the components presented in Table 4 were identified.

Analysis of the impacts of historical-cultural tourism on the residents' social subjective dimension showed that within the local community components, the participatory factor accounted for 8.26 percent of the total vari-

ance in the subjective quality of life in terms of the local community component. The second is the commitment to traditions, which captured 7.95 percent of the variance. In other words, 7.95 percent of the local community's subjective dimension was related to commitment to traditions. After that, leisure time with a percentage variance of 7.32 percent, interaction with 6.9 percent of the variance, residents' coherence with 6.79 percent of the variance, regional security with 6.3 percent of the variance, migration with 6.01 percent of the variance, education with 5.79 percent of the variance, the traditional structure with 5.55 percent of the variance, and road safety with 5.29 percent of the variance totally could account for 66.17 percent of the variance in the subjective quality of life in terms of the local community component.

The factor analysis of the nutrition and health component also showed that protein, which accounted for 7.99 percent of the variance, was considered to be the most important factor of nutrition and health component. The second factor was grains accounting for

Table 4

Eigenvalues, Variance Percentage, and Cumulative Variance Percentage of Extracted Factors

Components/ factors	Eigen value	% of variance	% Cumulative	Components/ factors	Eigen value	% of variance	% Cumulative
Local livelihoods				**Physical**			
Farm income	2.28	14.24	14.24	Infrastructure	4.52	10.51	10.51
Non-farm income	2.2	13.74	27.98	Housing infrastructure	4.51	10.5	21.01
Poverty of the residents	1.72	10.76	38.74	Transportation	3.36	7.82	28.84
Occupation	1.67	10.45	49.19	Health infrastructure	3.01	7	35.84
Debt	1.53	9.58	58.77	Cultural-security	2.77	6.45	42.28
Local community				Sport infrastructure	2.69	6.25	48.53
Participatory	3.06	8.26	8.26	Tourism infrastructure	2.63	6.12	54.65
Commitment to traditions	2.94	7.95	16.22	Services infrastructure	2.35	5.46	60.12
Leisure time	2.71	7.32	23.54	Educational infrastructure	1.7	3.95	64.06
Interaction	2.55	6.9	30.44	Marketing and sales in-frastructure	1.64	3.8	67.87
Residents' coherence	2.51	6.79	37.23	**Cost**			
Regional security	2.33	6.3	43.54	Leisure costs	2.27	8.74	8.74
Migration	2.22	6.01	49.55	Education costs	2.21	8.5	17.24
Education	2.14	5.79	55.33	Housing costs	2	7.7	24.94
Traditional structure	2.05	5.55	60.88	Communication costs	1.99	7.67	32.61
Road safety	1.96	5.29	66.17	Farming costs	1.95	7.5	40.12
Asset				Health care costs	1.86	7.14	47.26
Farming and ranching	3.33	11.49	11.49	Insurance costs	1.83	7.02	54.28
Communication facilities	2.52	8.67	20.17	Personal costs	1.82	6.99	61.27
Agricultural equipment	2.39	8.26	28.42	**Nutrition and health**			
Vehicles	2.34	8.05	36.48	Protein	2.56	7.99	7.99
Essential equipment	2.22	7.64	44.12	Grains	2.35	7.35	15.34
Leisure facilities	2.18	7.5	51.62	Beverages	2.09	6.54	21.89
Heating and cooling system	1.87	1.87	58.06	Vegetables	2.06	6.43	28.32
Environmental sustainability				Diary product	1.97	6.16	34.48
Environmental preservation	2.83	16.64	16.64	Stuffing	1.91	5.96	40.44
Village landscape	2.38	13.98	30.62	Fats	1.89	5.9	46.35
Natural hazards	2.1	12.33	42.94	Tobacco	1.71	5.33	51.68
Destruction of the environment	1.92	11.27	54.22	Modern foods	1.54	4.8	56.48
Arrangements	1.2	7.07	61.28	Salts	1.28	4	60.48

7.35 percent of the variance after proteins and was most influential on the nutrition and health component. Then, the factor of beverage with 6.54 percent of the variance, vegetables with 6.43 percent of the variance, dairy products with 6.16 percent of the variance, stuffing with 5.96 percent of the variance, fats with 5.9 percent of the variance, tobacco with 5.33 percent of the variance, modern foods with 4.8 percent of the variance, and salts with 4 percent of the variance totally captured 60.48 percent of the variance in the subjective

International Journal of Agricultural Management and Development, 12(1), 43-62, March 2022.

52

quality of life in terms of the nutrition and health component. The impacts of tourism on the environmental subjective dimension in two components of physical and environmental sustainability were investigated. The findings of the research showed that the first factor, i.e., infrastructure, explained 10.51 percent of the total variance in variables related to the physical component of residents' subjective quality of life. Housing infrastructure accounted for 10.5 percent of the variance, transportation accounted for 7.82 percent, health infrastructure for 7 percent, cultural-security infrastructure for 6.45 percent, sports infrastructure for 6.25 percent, tourism infrastructure for 6.12 percent, services infrastructure for 5.46 percent, educational infrastructure for 3.95 percent, and marketing and sales for 3.8 percent. Therefore, these factors could explain 67.87 percent of the total variance in the physical subjective component of residents' quality of life.

Also, factor analysis of environmental sustainability indicated that the first factor, i.e., the environmental preservation with an eigenvalue of 2.83, could explain 16.64 percent of the variance. After that, the village landscape account for 13.98 percent of the variance, natural hazards accounting for 12.33 percent of the variance, destruction of the environment capturing 11.27 percent of the variance, and arrangements capturing 7.07 percent of the variance could together account for 61.28 percent of the variance related to residents' subjective quality of life in term of environmental sustainability component. Economic subjective dimension was investigated by three components including cost, asset, and local livelihood. In the cost component, the first factor, i.e., leisure costs, explained 8.74 percent of the variance in all variables. It had the greatest effect on the cost component in the studied area. The second factor, i.e., the housing cost, captured 8.5 percent of the total variance. After that, the cost of communication (accounting for 7.7% of the variance), the cost of farming (accounting for 7.67% of the variance), the cost of educa-

tion (capturing 7.5% of the variance), healthcare cost (capturing 7.14% of the variance), insurance cost (capturing 7.02% of the variance), and personal cost (capturing 6.99% of the variance) explained 61.27 percent of the total variance of the cost component of residents' subjective quality of life.

In the component of local livelihoods, the most important factor affecting residents' subjective quality of life is the "farm income" factor (with 14.24% of variance). After that, factors including non-farm income (with 13.74% of variance), the poverty of the residents (with 10.76% of variance), occupation (with 10.45% of variance), and debt (with 9.58% of variance) had the highest contribution in the residents' subjective quality of life. These factors totally explain 58.77 percent of variance related to the local livelihoods' component.

Another component was asset. Based on the results, the factor "farming and ranching" with an eigenvalue of 3.33 and 11.49 percent effectiveness in accounting for the variance had the greatest effect on the subjective component of the asset. The next factors including communication facilities (accounting for 2.52 percent of the variance), agricultural equipment (8.26%), vehicles (8.05%), essential equipment (7.64%), leisure facilities (7.5%), the heating and cooling system has the highest contribution to determining the level of quality of life in terms of asset. These factors totally explain 58.06 percent of the variance related to the asset component of residents' subjective quality of life.

Factors affecting the subjective quality of life in tourist destination villages were reduced using factor analysis. Factor scores were calculated by multiplying the factor loading by standardized variables. Since the varimax method was used for component rotation, the obtained factor scores were independent and there was no linear combination between them. Also, the initial indicators were summarized in a number of factors, and each one was given the appropriate weight (Feizabadi & Maleki, 2016). Therefore, the

aggregating factor scores was a very good representative for indicators (Taghvaei et al., 2012). In this research, the output of factor analysis (mean scores of aggregating factor scores) was used as input for the Morris model, which was implemented in the following steps.

Step 1: Setting index value matrix in the form of IN (N*M) in which the rows represent the individuals responded and the columns represent indicators.

Step 2: Standardizing all selected numbers by using the Morris deprivation coefficient and obtaining the minimum (min_j) and maximum (max_j) of each index (Aliyari & Sharfzadeh, 2017). In other words, by calculating the minimum and maximum indices, the deprivation range of individuals' quality of life is obtained in terms of all indicators.

Step 3: The deprivation rate is calculated using the indexes selected in the first step and the values of the maximum and minimum indices calculated in the second step (Shams & Rashidi, 2011). In this equation, Y_{ij} is the value of the Morris deprivation coefficient for index (i) and individual (j) and IN_{ij} is the numerical value of index (i) for individual (j),

Step 4: The final coefficient of life quality development is calculated. To do this, it is necessary to divide the sum of the values of the third step indicators into the number of the indicators used (Nemati et al., 2016). In equation 3, *n* is the number of studied indexes and D.I. is the major development indicator of each unit (Aliyari & Sharfzadeh, 2017). The overall structure of the model used is as follows:

$$Y_{ij} = \frac{IN_{ij} - IN_{ij\,min}}{IN_{ij\,max} - IN_{ij\,min}} \qquad (2)$$

Y_{ij} = inequality index i for the individual (j)
IN_{ij} = index i for the individual (j)
$IN_{ij\,min}$ = the minimum of index i
$IN_{ij\,max}$ = the maximum of index i

$$D.I. = \frac{\sum_i^n Y_{ij}}{n} \qquad (3)$$

The larger the D.I. is (this index ranges from zero to 1), the higher level the region has (Khorrambakht et al., 2014). Table 5 shows the status of residents' quality of life in the target tourist villages in Marvdasht County in terms of total factor scores and degree of development.

Table 5
Indicators of the Subjective Quality of Life in the Tourist Destination Villages in Marvdasht County in Terms of DI

Dimension	Components	Factors
Economic	Local livelihood = 0.46	Farm income= 0.47; Non-farm income=0.44; the poverty of the residents= 0.51; occupation= 0.6; debt= 0.48
	Asset= 0.544	Farming and ranching= 0.48; communication facilities = 0.56; agricultural equipment= 0.5; vehicles= 0.53; essential equipment= 0.61; leisure facilities= 0.56; heating and cooling system = 0.47
	Cost= 0.57	Cost of (Leisure= 0.48; housing= 0.52; communication= 0.51; farming= 0.49; education= 0.44; health care= 0.45; insurance= 0.55; Personal= 0.43)
Social	Local community = 0.61	Participatory= 0.57; commitment to traditions= 0.61; leisure time= 0.55; interaction= 0.5; residents' coherence= 0.6; regional security= 0.49; migration= 0.56; education= 0.42; traditional structure= 0.53; road safety= 0.5
	nutrition and health= 0.6	Protein= 0.5; grains= 0.53; beverages= 0.53; vegetables= 0.57; diary product= 0.52; stuffing= 0.49; fats= 0.5; tobacco= 0.53; modern foods= 0.62; salts= 0.4
Environmental	Environmental sustainability = 0.56	Environmental preservation =0.46; village landscape= 0.51; natural hazards= 0.5; destruction of the environment= 0.53; arrangements= 0.52
	Physical= 0.51	Infrastructure= 0.58; Housing Infrastructure = 0.53; transportation= 0.59; health infrastructure= 0.55; cultural-security= 0.45; sport infrastructure= 0.55; tourism infrastructure= 0.42; services infrastructure= 0.48; educational infrastructure = 0.54; marketing and sales infrastructure= 0.5
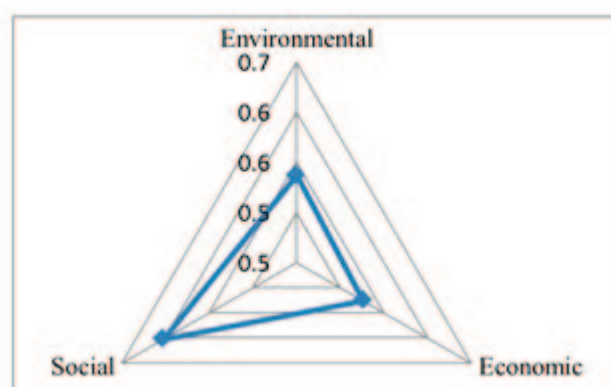
Figure 2: The Impacts of Historic-Cultural Tourism on the Subjective Dimension of the Residents' Quality of Life

Figure 2 illustrates the impacts of historical-cultural tourism on the subjective dimensions (economic, social, and environmental) of the residents' quality of life. Based on the findings, the level of quality of life in the target tourist villages in Marvdasht County is medium according to the Morris method with a coefficient of 0.55. Based on the results of the developmental level of the tourism impacts on the economic and environmental subjective dimensions (with a coefficient of 0.53 and 0.54, respectively), it is at the medium level and in the social subjective dimension (with a coefficient of 0.6), it is at a desirable level. As can be seen, the highest score in the subjective quality of life is related to the social index.

CONCLUSIONS AND RECOMMENDATIONS

The results of the developmental level of subjective quality of life in terms of nutrition and health component in Marvdasht County showed that the residents' subjective quality of life was at a high level in terms of the modern foods. One of the reasons for this is the extensive access of households to food in rural areas in Marvdasht County since the region has a high status in terms of the production of many foodstuffs in Fars province, making foodstuff available to residents. This finding is consistent with the results of Tanhaee et al. (2015), who examined food security in rural areas of Marvdasht, and Fanni et

al. (2014), who referred to improving the food consumption pattern.

The findings also indicate the favorable level of residents' subjective quality of life in tourism target villages in terms of the local community component. In this regard, the residents of the villages of this area have shown some images of participation and coherence. For example, the residents in Dashtak have shown their participation and coherence by Shire Pazan ritual along with local folk music and singing together, participating in walnut shaking, the ceremony of making pomegranate juice in Kondazi Village, participating in holding the festival of pomegranate tourism in Faruq Village, and the biological control of pests. In addition, the residents of Dashtak and Kondazi have retained a specific dialect, which is rooted in the South Pahlavi dialect, and they speak in this particular dialect. Local food of the villagers in Kondazi used in everyday life includes *Ash e Somaq*, *Ash e Majak*, *Ash e Reshteh, Ashe Bane*, and so on. Also, local food in Dashtak includes *Kofte Berenji*, *Plo Kangar, Plo Lizak, Ash e karde, Ash e Sagel, Khoresht Kalam, Ash e Shalgham*, and so on. This finding is consistent with the results of Diniz et al. (2014).

However, the studied people's subjective quality of life is poor in terms of education since comparing the current status of educational facilities of residents in Dashtak with

its proud past has caused residents' dissatisfaction. This finding is consistent with Azami et al. (2016) and Rezvani et al. (2012), who have indicated a positive relationship between education and quality of life. In addition, findings on the level of subjective quality of life in terms of living costs showed that the individuals' level of subjective quality of life was medium in terms of the cost of housing, insurance, communication, farming, leisure, and healthcare and weak in terms of educational cost and individual cost. A study on the level of residents' subjective quality of life in terms of asset index showed that residents had a favorable status in terms of essential equipment. Also, the results indicated that residents' quality of life in terms of communication facilities, leisure facilities, vehicles, agricultural equipment, farming and ranching, and heating and cooling system was medium. The results also showed that in physical indicators, the residents' subjective quality of life was moderate in terms of transportation infrastructure, healthcare infrastructure, sports infrastructure, education infrastructure, housing infrastructure, marketing and sales infrastructure, and service infrastructure. Nevertheless, it is weak in terms of cultural and tourism infrastructure since the residents in tourist destination villages have high expectations of such infrastructures due to the arrival of tourists to the region.

Also, according to the results, the level of residents' subjective quality of life in terms of local livelihood is generally at a medium level. The level of their subjective quality of life is favorable in terms of occupation and is medium in terms of the poverty of the residents, debt, farm income, and non-farm income. The level of residents' subjective quality of life in terms of environmental sustainability is generally at a medium level in all factors (including environmental degradation, arrangements, village landscape, environmental hazards, and environmental preservation). Based on the overall results, the economic and environmental subjective

quality of life is at a medium level with coefficients of 0.52 and 0.54, respectively, and the social subjective dimension with a coefficient of 0.6 is at a desirable level. Therefore, the highest score of the subjective quality of life in the tourist destination villages is related to the social index.

Regarding the significance of tourism for countries, its planning is of paramount importance. Due to the attractiveness of Marvdasht County and the priority of residents' welfare and their quality of life for managers and authorities, it is essential to identify previous political strategies and determine residents' quality of life locally and regionally. Explaining the current situation in terms of the inhabitants' quality of life in the tourist destination rural areas is a starting point since these areas are confronted with different policies for the future. Hence, considering the current situation in the region, policymakers should strengthen the positive impacts and mitigate the negative impacts of tourism on residents' quality of life. This will contribute to designing future planning policies regionally and help the authoritative institutes and their actors make more accurate and efficient policies. Therefore, it is suggested to design future policies locally, take into account the current situation, and identify the strengths and weaknesses. Accordingly, the following suggestions are recommended:

Since tourism infrastructure is at a poor level of subjective quality of life and does not meet the rural residents' expectations, it seems necessary to create conditions for the development of tourist infrastructure without changing the ancient texture of the village.

The fact that non-farm income is at an unfavorable level of subjective quality of life indicates a failure to meet the residents' expectations. As a result, it is recommended to take the ways to increase the residents' income through the expansion of tourism business and entrepreneurship in this area into account.

According to the environmental preserva-

tion factor and the active aqueducts and the level of groundwater resources in Faruq Village, it seems imperative to consider a plan for the optimal use of aqueduct water and provide water exports for the benefit of rural residents of the regions affected by the drought crisis.

ACKNOWLEDGEMENTS

REFERENCES

Adabi Mamaqani, M., Khani, F., Sojasi Qidari, H., & Farrokhi Sis, S. (2014). Evaluation of the impacts of culture-based tourism development in socio-cultural on rural destinations (case study: Kan district–Sulqan rural district). *Spatial Planning*, *4*(2), 55-78 (In Persian).

Afshari-Azad, S., Osmani, A., & Piri, S. (2014). Sustainable development and occupation status in rural tourism: Case study, Shilan village, Palangan. *Geographical Journal of Tourism Space*, *3*(10), 121-146 (In Persian).

Ajza-Shokouhi, M., Bouzarjomehry, K., Istgaldi, M., & Modudi, M. (2013). Examine the effects of tourism on the host community's quality of life case study: city Bandar Turkmen. *Geographic Space*, *14*(47), 101-125 (In Persian).

Akbarian-Ronizi, S., & Shaykh-Baygloo, R. (2015). Assessment of environment quality of villages' tourism case: Asara County. *Rural Research*, *6*(2), 433-457 (In Persian).

Alibigy, J., & Ghasemi, Y. (2016). The effect of religious tourism on quality of life and social capital of rural households (case study: Bardy village, Dehloran County). *Social Studies in Tourism*, 6(3), 87-116 (In Persian).

Aliyari, V., & Sharfzadeh, M. (2017). Measuring inequality of services in the villages of the tourism destination of Firoozabad. *Space Economy & Rural Development*, 6, 23-44 (In Persian).

Alizadeh, J., Barghi, H., Rahimi, H., & Afsharipour, A. (2013). Evaluating quality of life in rural areas using Fuzzy Topsis case study: Myandeh Village, Fars Province. *Rural Research*, *4*(3), 615-640 (In Persian).

Anabestani, A., & Mahmoodi, M. (2016). The effects of religious tourism on improvement of rural life quality (case study: rural areas of Mashhad). *Touurism Planning and Development*, *5*(18), 97-118 (In Persian).

Andereck, K. L., & Nyaupane, G. P. (2011). Exploring the nature of tourism and quality of life perceptions among residents. *Journal of Travel Research*, *50*(3), 248-260.

Aref, F. (2011). The effects of tourism on quality of life: A case study of Shiraz, Iran. *Life Science Journal*, *8*(2), 26-30.

Azami, A., jaded, M. H., Sulaimany, A., & Alibaygi, A. (2016). Explanation of tourism effects to sustainable rural development: (case study: Ryjab village in Dalahoo city, Kermanshah Province). *Heritage & Tourism Journal*, *1*(1), 223-342 (In Persian).

Babaei-Semiromi, M. R., Naeini, M. N., & Abbaspour, S. (2014). Tourism and economic development in Iran Neural Networks Approach (1980-2011). *Economic Growth and Development Research*, *4*(14), 113-130 (In Persian).

Babakhanzadeh, E. (2013). Measuring the socio- cultural, economic and cultural impact of tourism development in Uramanat region. *Journal of Spatial Planning*, *3*(3), 145-164 (In Persian).

Badri, A., Rezvani, M. R., & Gharanjik, M. (2013). The quality of life measurement in rural areas based on subjective indicators case study: Sothern Jafarby Dehestan, Torkman County. *Geography and Environmental Planning*, *24*(2), 53-74 (In Persian).

Bahramian, M., & Shamsoddini, A. (2018). A quantitative analysis on the role of urban management in promoting sustainable tourism (Case study: Marvdasht City). *Research & Urban Planning*, *9*(32), 131-140 (In Persian).

Bandarabad, A., & Ahmadinezhad, F. (2014).

International Journal of Agricultural Management and Development, 12(1), 43-62, March 2022.

57

Assessment of quality of life with emphasis on the principles of habitable cities in the region 22 of Tehran. *Research and Urban Planning*, 5(16), 55-74 (In Persian).

Barghi, H., & Aslani, B. (2018). Determining the social capital role on the formation of villagers' entrepreneurship contexts (case study: Sidan section of Marvdasht city). . *Journal of Spatial Planning*, *22*(1), 54-83 (In Persian).

Bertelli, M., Francescutti, C., & Brown, I. (2020). Reframing QoL assessment in persons with neurodevelopmental disorders. *Ann Ist Super Sanità*, *56*(2), 180-192.

Brown, I., Raphael, D., & Renwick, R. (1998). Quality of life instrument package for adults with developmental disabilities, full version: Manual and instruments. *Toronto: Centre for Health Promotion, University of Toronto*.

Campón-Cerro, A. M., Folgado-Fernández, J. A., & Hernández-Mogollón, J. M. (2017). Rural destination development based on olive oil tourism: The impact of residents' community attachment and quality of life on their support for tourism development. *Sustainability*, *9*(9), 1-16.

Carneiro, M. J., & Eusébio, C. (2015). Host-tourist interaction and impact of tourism on residents' Quality of Life. *Tourism and Management Studies*, *11*(1), 25-34.

Carneiro, M. J., Eusébio, C., & Caldeira, A. (2017). The influence of social contact in residents' perceptions of the tourism impact on their quality of life: A structural equation model. *Journal of Quality Assurance in Hospitality & Tourism*, *19*(1), 1-30.

Chancellor, C., Yu, C.-P. S., & Cole, S. T. (2011). Exploring quality of life perceptions in rural midwestern (USA) communities: An application of the core–periphery concept in a tourism development context. *International Journal of Tourism Research*, *13*, 496-507.

Chen, Y., Cottam, E., & Lin, Z. (2020). The effect of resident-tourist value co-creation on residents' well-being. *Journal of Hospitality and Tourism Management*, *44*, 30-37.

Chi, C. G.-q., Cai, R., & Li, Y. (2017). Factors influencing residents' subjective well-being at World Heritage Sites. *Tourism Management*, *63*, 209-222.

Cho, T., Cho, T., & Zhang, H. (2021). The effect of the acculturation of Chinese immigrants on tourist satisfaction and quality of life. *Sustainability*, *13*(4), 1-17.

D'Agostini, L. R., & Fantini, A. C. (2008). Quality of life and quality of living conditions in rural areas: Distinctively perceived and quantitatively distinguished. *Social Indicators Research*, *89*, 487-499.

Diniz, S. R., Falleiro, S. P., & Barros, M. M. d. (2014). Local residents' perception of the psycho-social and economic impact of tourism in Goa. *International Journal of Scientific and Research Publications*, *4*(11), 1-7.

Fahmi, F. Z., & Sari, I. D. (2020). Rural transformation, digitalisation and subjective wellbeing: A case study from Indonesia. *Habitat International*, *98*, 1-23.

Fanni, Z., Touli, M. A., & Zahmatkesh, Z. (2014). The effects of tourism on urban sustainable development on the base of habitant's views; case study: Qeshm Island. *Tourism Management Studies*, *9*(28), 39-72 (In Persian).

Farahani, H., Einali, J., & Mouradi, M. (2019). Effects of tourism on the quality of life of villagers Case: Gazrokhan village in Qazvin County. *Space Economy and Rural Development*, *8*, 23-42 (In Persian).

Feizabadi, Y., & Maleki, F. (2016). Study and comparison of development degree of rural areas in Iran's provinces. *Growth and Development of Rural & Agricultural Economic*, *1*(1), 71-82 (In Persian).

Fu, X., Ridderstaat, J., & Jia, H. C. (2020). Are all tourism markets equal? Linkages between market-based tourism demand, quality of life, and economic development in Hong Kong. *Tourism Management*, *77*, 1-13.

Gadad, A., & Kamashetty, S. B. (2014). Potentiality of rural tourism in India: The socio-economic impact. *Journal of Commerce and*

Management Thought, *5*(2), 187-200.

Ghadami, M., Firouzjaei, N. A., & Lasbouy, M. R. (2011). Study of the role of tourism in changes in the quality of life of the destination (Case study: Clarabad Tonkabon, Mazandaran). *Journal Iranian Social Studies*, *4*(3), 101-113 (In Persian).

Ghadiri-Masoum, M., Gharagozlou, H., Ahmadi, S., & Lorestani, A. (2014). Spatial analysis of quality of life in rural settlements (case study: village of Boluran, Lorestan province). *Studies of Human Settlements*, *9*(28), 1-16 (In Persian).

Ghahremanzadeh, M., Mahmoudi, H., & Javdan, E. (2013). Forecasting seasonal demand for tourism in Iran: Application of time series techniques. *Tourism Planning and Development*, *2*(7), 66-81 (In Persian).

Honarkhah, R., Zarei, S., & Ghaedi, M. (2020). Measurement the difference gender perspective of social dimension satisfaction of quality of urban life in central texture of coastal city of Bandar Abbas. *KURMANJ; The Journal of Culture, Humanities and Social Science*, *2*(1), 1-10.

Hosseini, S. H., & Bagherian, K. (2015). An analysis on constituent component of quality of life in Nowshahr. *Environmental Based Territorial Planning*, *7*(27), 55-78 (In Persian).

Huttasin, N. (2008). Perceived social impacts of tourism by residents in the OTOP tourism village, Thailand. *Asia Pacific Journal of Tourism Research*, *13*(2), 175-191.

Jalali, M., Gandomkar, A., & Ferdowsi, S. (2016). Analyze and explain the effects of tourism on the quality of life (Case study: Babak city-Kerman). *Geographical Planning of Space Quarterly Journal*, *6*(20), 161-174 (In Persian).

Kafashpor, A., Ghasempour-Ganji, S. F., Sadeghian, S., & Johnson, L. W. (2018). Perception of tourism development and subjective happiness of residents in Mashhad, Iran. *Asia Pacific Journal of Tourism Research*, *23*(6), 521-531.

Karkehabadi, Z. (2017). Comparative comparison of urbanism quality according to environmental index (Case study: Semnan worn out and new urban textures). *Geography (Regional Planning)*, *7*(1), 33-48 (In Persian).

Kazemi, A., Yaghfouri, H., Kalantarzadeh, M., & Hatami, D. (2015). Comparison of tourism effect on economic growth in Iran and Turkey. *Geographical Journal of Tourism Space*, *4*(13), 1-18 (In Persian).

Khajeshahkohi, A. R., & Minaei, F. (2014). A comparative study of the quality of life in tourist and non-tourist cities. (Case study: Shandeez and Chenara'an). *Tourism Planning and Development*, *3*(10), 49-64 (In Persian).

Khorrambakht, A., Moshiri, S. R., & Mahdavi, M. (2014). Recognition of the role of water in rural development of arid regions using morris model and correlation analysis: A case study in Larestan, Iran. *European Online Journal of Natural and Social Sciences, Special Issue on Environmental, Agricultural, and Energy Science*, *3*(3), 295-303.

Khosrowjerdi, M., & Nooripoor, M. (2017). Analysis of factors affecting rural people's attitudes towards rural tourism: the case of Doroodzan District of the Marvdasht County. *Rural Development Strategies*, *3*(3), 303-316 (In Persian).

Kim, H. L., Kim, Y. G., & Woo, E. (2020). Examining the impacts of touristification on quality of life (QOL): the application of the bottom-up spillover theory. *The Service Industries Journal*, *40*, 1-16.

Kolawole, O. I., Mbaiwa, J. E., Mmopelwa, G., & Kgathi, D. L. (2017). The socio-cultural impacts of tourism on people's quality of life in Maun, Botswana. *Botswana Notes and Records*, *49*, 73-86.

Lee, Y. J. (2008). Subjective quality of life measurement in Taipei. *Building and environment*, *43*(7), 1205-1215.

Li, X., Wan, Y. K. P., & Uysal, M. (2020). Is QOL a better predictor of support for festival development? A social-cultural perspective. *Current Issues in Tourism*, *23*(8), 1-14.

Lipovcan, L. k., Brajsa-Zganec, A., & Poljanec-Boric, S. (2014). What is good for tourism

International Journal of Agricultural Management and Development, 12(1), 43-62, March 2022.

59

should be good for residents too: The relationship between the quality of the touristic offer and subjective well-being of reseadents. *Tourism Analysis*, *19*, 719-730.

Liu, Y., Hu, Y., Sun, H., & Zhou, G. (2020). Study on residents' quality of life in the context of urban shrinkage: Analysis based on subjective and objective data. *Journal of Urban Planning and Development*, *146*(3), 1-14.

Macke, J., Casagrande, R. M., Sarate, J. A. R., & Silva, K. A. (2018). Smart city and quality of life: Citizens' perception in a Brazilian case study. *Journal of Cleaner Production*, *182*, 717-726.

Mahdavi, D., Eftekhari, A. R., & Gheidari, H. S. (2016). Design strategies for the sustainable development of tourism Iranian historic- cultural villages. *Geography and Planning*, *20*(56), 275-300 (In Persian).

Manouchehri, S., & Manouchehri, D. (2014). Relationship between development, tourism and security with an emphasis on the role of security and law enforcement agencies. *Journal of Policing Knowledge of the Capital Police*, *4*(23), 15-23 (In Persian).

Massam, B. H. (2002). Quality of life: public planning and private living. *Progress in planning*, *58*(3), 141-227.

Matatolu, I. (2019). Tourism and residents quality of life: a critical examination. *Journal of Pacific Studies*, *39*(1), 128-164.

Mirlotfi, M., & Mollanoroozi, M. (2013). Effects of Khayyam industrial township on the objective quality of Neyshabur villager's live. *Geographic Space*, *14*(46), 235-259 (In Persian).

MohammadPourjaberi, M. (2016). Analyzing the role of tourism in citizens' life quality with emphasis on subjective indicators case study: Fasham City (Shemiranat County). *Urban Tourism Journal*, *1*(1), 35-45 (In Persian).

Mohammadrezaei, M., Chizari, M., Sadighi, H., & Mahmoudi, M. (2020). Transition of objective to subjective well-being in evaluation of farmers' quality of life: Utilizing new epistemological approach among Iranian rice farmers. *Journal of Agricultural Science and Technology*, *22*(4), 935-951.

Mohit, M. A. (2013). Objective analysis of variation in the regional quality of life in Malaysia and its policy implications. *Social and Behavioral Sciences*, *101*, 454-464.

Moons, P., Budts, W., & Geest, S. D. (2006). Critique on the conceptualisation of quality of life: a review and evaluation of different conceptual approaches. *International Journal of Nursing Studies*, *43*(7), 891-901.

Nemati, M., Tahmasebi, S., & Ghareghani, M. (2016). Assess the factors of development level in rural areas of Fars Province by using factor analysis and unbalanced coefficient Morris. *Journal of Regional Planning*, *6*(23), 45-57 (In Persian).

Ouyang, Z., Gursoy, D., & Chen, K. C. (2019). It's all about life: Exploring the role of residents' quality of life perceptions on attitudes toward a recurring hallmark event over time. *Tourism Management*, *75*, 99-111.

Poudyal, N. C., Gyawali, B. R., & Simon, M. (2019). Local residents' views of surface mining: Perceived impacts, subjective well-being, and support for regulations in southern Appalachia. *Journal of Cleaner Production*, *217*, 530-540.

Pourtaheri, M., Eftekhari, A. R., & Fatahi, A. (2011). Assessment quality of life in rural areas (Case study: Northern Khâvé village, Lorestan Province). *Human Geography Research Quarterly*, *43*(76), 13-31 (In Persian).

Qaedi, M. (2014). Assessing the cultural impact of tourism on the host community's quality of life the case of: Bandar Abbas Coastal City. Paper presented at the The first national conference of tourism and green tourism in Iran, May 8, 2014, Hamedan, 1-12.

Rahimianzarif, E., Khanian, M., Mirniazmandan, S., & Salimi, M. (2020). 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. *Journal of Civil Engineering and Urbanism*, *10*(1), 7-12.

Rasoolimanesh, S. M., & Seyfi, S. (2020). Residents' perceptions and attitudes towards tourism development: a perspective article. *Tourism Review*, *76*(1), 51-57.

Rezvani, M. R., Badri, S. A., Sepahvand, F., & Roonizi, S. R. A. (2012). The effects of second home tourism on improving life quality of rural residents (Case: Roudbar-e Qasran District- Shemiranat County). *Urban- Regional Studies and Research*, *4*(13), 23-40 (In Persian)

Samadi-Ahari, A., & Sattarzadeh, D. (2019). Evaluating quality of life in a different social setting (Case study: Magsudiyeh district, MollaZeynal district, and Roshdiyeh district in Tabriz, Iran). *Space Ontology International Journal*, *8*(3), 41-51.

Sampaio, P. Y. S., Ito, E., & Sampaio, R. A. C. (2013). The association of activity and participation with quality of life between Japanese older adults living in rural and urban areas. *Clinical Gerontology & Geriatrics*, *4*, 51-56.

Shah-Hosseini, P., & Tavakkoli, H. (2014). The analysis of urban life quality indices case: Vardavard locality, in the 21st district of Tehran city. *Environmental Based Territorial Planning*, *7*(24), 127-144 (In Persian).

Shahrokhi-Sardoo, S., Nooripoor, M., & Pedram, P. (2016). Assessment of the quality of life (QL) in rural areas using numerical taxonomy: The case of Esfandegheh area of Jiroft County. *Iranian Agricultural Extension and Education Journal*, *11*(2), 31-47 (In Persian).

Shakour, A., Shamsoddini, A., Zare, A., & Karimi, F. (2014). Quantitative analysis of rural development in Marvdasht using morris model and coefficient of variation. *Research and Rural Planning*, *2*(2), 49-74 (In Persian).

Shams, M., & Rashidi, G. (2011). Assessment of sustainability indexes in deteriorated precincts of Asadabad by using Mouriss disproportionate coefficient. *Journal of the Studies of Human Settlements Planning (Journal of Geographical Landscape)*, *6*(14), 18-20 (In Persian).

Shams, M., Saffari-Raad, A., Ghasemi, A., & Rad, T. G. (2015). An analysis on urban tourism by SWOT model (Case study: Marvdasht City). *Journal of Tourism & Hospitality Research Islamic Azad University, Garmsar Branch*, *4*(2), 67-80 (In Persian).

Sharifi-Renani, H., Safaei-Shakib, M., & Emadzadeh, M. (2009). The effect of tourism industry on economic growth: The case of Iran. *Journal of Financial Economics (Financial Economics and Development)*, *3*(6), 1-17 (In Persian).

Sheikhzadeh, E. (2016). Designing a model of effective factors in improving the quality of life by highlighting the impact of tourism development (Case of study: Tehran city). *Iranian Social Development Studies*, *8*(1), 51-65 (In Persian).

Sirgy, M. J. (2019). Promoting quality-of-life and well-being research in hospitality and tourism. *Journal of Travel & Tourism Marketing*, *36*(1), 1-13.

Sojasi-Qeidari, H. (2016). Impact analysis of cash payment subsides on rural family's quality of life improvement (the case of: Shiring rural district). *Majlis & Rahbord*, *23*(85), 107-142. (In Persian).

Sojasi-Qeidari, H., Shayan, H., & Razmi, Z. N. (2015). The analysis of non-farm entrepreneurship in improving the quality of life in the villages case: Villages located in Shandiz Area, Binaloud County. *Space Economy & Rural Development*, *4*(12), 55-76 (In Persian).

Soltani, Z., Taghdisi, A., & Kiyani, S. (2014). The role of ecotourism in job opportunities and income. *Geographical Researches Journal*, *28*(4), 137-152 (In Persian).

Sorés, A., & Peto, K. (2015). Measuring of subjective quality of life. *Procedia Economics and Finance*, *32*, 809-816.

Statistical Center of Iran. (2016). Census of population and housing. Retrieved from http://www.amar.org.ir

Steenholdt, N. C., & Chimirri, D. (2018).

Tourism & Quality of Life in Greenland: Exploration through farm stays in South Greenlandic settlements. *The Arctic Yearbook 2018*, 123-140.

Suntikul, W., Pratt, S., Kuan, W. I., Wong, C. I., Chan, C. C., Choi, W. L., & Chong, O. F. (2016). Impacts of tourism on the quality of life of local residents in Hue, Vietnam. *An International Journal of Tourism and Hospitality Research*, *27*(4), 405-420.

Taghilou, A., Toutakhane, A. M., & Aftab, A. (2019). Evaluating the effectiveness of resettlement patterns in improving quality of life indicators in the earthquake-stricken villages (Case study: Varzeghan County). *Journal of Research and Rural Planning*, *8*(2), 1-18 (In Persian).

Taghvaei, M., Tagdisi, A., & Boshagh, M. R. (2012). Finding the developed positions of Fars Province Townships in main indicators of agricultural field. *Spatial Planning*, 1(2), 25-40 (In Persian).

Tanhaee, M., Zare, E., Shirani-Bidabadi, F., & Jolaee, R. (2015). Investigation of food security status using diet diversity index: A case study of rural areas, Marvdasht County in Fars Province of Iran. *Village and Development*, *18*(4), 17-35 (In Persian).

Tayebnia, S. H., Mohammadi, S., & Manochehri, S. (2016). The analysis of the impacts of tourism on the quality of rural life (Case study: Uraman district of Sarvabad county). *Research and Rural Planning*, *5*(1), 163-179 (In Persian).

Thuong, N. T. T., & Anh, B. N. H. (2018). Assessing quality of life dimensions of residents living near industrial zones–A case from Yen Binh industrial zone in Thai Nguyen City. *International Journal of Development and Sustainability*, *7*(2), 764-783.

Ulengin, B., Ulengin, F., & Guvenc, U. (2001).

A multidimensional approach to urban quality of life: The case of Istanbul. *European Journal of Operational Research*, *130*(2), 361-374.

Vedaye-kheiry, R., & Rezayi, M. (2017). Factors affecting quality of citizens life with the mediating role of social justice (sample: Ferdosiyeh City). *Regional Planning*, *6*(24), 231-244 (In Persian).

Yang, H., Chan, G. C. S., & Li, W. (2017). Tourism impacts on the quality of life in Hong Kong. *International Journal of Marketing Studies*, *9*(3), 103-112.

Yolal, M., Gursoy, D., Uysal, M., Kim, H. L., & Karacaoǧlu, S. (2016). Impacts of festivals and events on residents' well-being. *Annals of Tourism Research*, *61*, 1-18.

Zanganeh-Shahraki, S., Hosseini, A., Sauri, D., & Hussaini, F. (2020). Fringe more than context: Perceived quality of life in informal settlements in a developing country: The case of Kabul, Afghanistan. *Sustainable cities and society*, *63*, 1-16.

Zhao, S., Nyaupane, G. P., & Andereck, K. (2011). Exploring the differences between tourists visiting heritage sites and those visiting cultural events: A cognitive perspective. *Travel and Tourism Research Association: Advancing Tourism Research Globally*, *54*, 1-12.

Ziaei, M., & Torabian, P. (2011). The limits of social tourism acceptable changes in host society of Iran; Parishan wetland as a case of study. *Geography*, *8*(27), 206-225 (In Persian).

International Journal of Agricultural Management and Development, 12(1), 43-62, March 2022.

62