

The empowerment of local tourism stakeholders and their perceived environmental effects for participation in sustainable development of tourism

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ARTICLE INFO

Keywords:

Empowerment
Local stakeholders
Perceived environmental effects
Participation
Sustainable development of tourism

ABSTRACT

The purpose of the present study was to measure the participation of local tourism stakeholders in the process of sustainable development of tourism by improving the empowerment indicators mediated by natural, economic, and social-environmental impacts perceived in route and destination settlements in Iran. The research methodology was discussed and explained according to Covariance-based SEM Techniques using a questionnaire results revealed that non-generative empowerment has a positive impact on perceived environmental effects influenced by non-generative empowerment over the participation of local stakeholders. Similarly, there is a positive relationship between the perceived effects. In this regard, the results of the present study also revealed the positive and convergent role of empowerment of local stakeholders in perceived environmental impacts, that is, the proper application of the dimensions of empowerment of local tourism stakeholders provides the grounds for the participation of local tourism stakeholders in the process of sustainable development of tourism.

1. Introduction

Influenced by Blau (1964) Social Exchange Theory, local stakeholders determine their support for the development of tourism depending on their impression of its positive or negative effects (Lee, 2013). In the process of formation of residents' perception and understanding of tourism, the concept of empowerment functions is significant as a predictor factor (Boley et al., 2014). Therefore, for STD (sustainable tourism development) in communities, the balance between power in the relations of local stakeholders in the field of tourism through the improvement of their ability is very important (Khalid et al., 2019). Likewise, influenced by Rowland's (1995) power theory, local stakeholders can be considered as tourism activists who take over the major role in the process of sustainable development of tourism at environmental-ecological, socio-cultural, and economic levels of rural settlements (Butler, 2017; Giampiccoli & Saayman, 2017).

Accordingly, improving individual and social capabilities of local stakeholders is considered essential to participate and influence the process of sustainable tourism development and to respond to environmental - ecological and socio-economic issues (Leslie, 2012; Park & Kim,

2016; Strydom et al., 2019). According to a report by UNWTO and Brandt Land Commission, the improvement of the dimensions of empowerment of local tourism stakeholders has paved the way for their growth from "Objective¹" to "Subjective²" and improves their participation in the local economy (Boley et al., 2018; Strzelecka et al., 2017). This is because the increased interest of local communities and the positive impact due to their participation in the process of sustainable tourism development is considered rather than focusing on economic growth, stimulating their internal motivation, and improving their behavior and perception during the empowerment of local tourism stakeholders (Burgos & Mertens, 2017; Marzuki & Khoo, 2016; Mathew & Kumar, 2014).

Moreover, according to the theory of social exchanges, paying attention to social power growth is an empowerment facilitating process. Accordingly, increasing local stakeholders' mass power leads to their increased participation in the decision-making process and, as a result, to various job opportunities. Therefore, the main objective of empowerment is to increase the local community's capacity and to raise their ability to develop community-based tourism (Khalid et al., 2019). Consequently, empowerment is an empowering and power-giving

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¹ Not Capable of Making Choices (Morrow & Torres, 2002).

² Capable of Making Choices (Morrow & Torres, 2002).

process (based on what Blau in 1964 and Rowlands in 1995 suggested) as well as a change in the behavior and actions to reach the preferred objectives (Rappaport, 1987; Rowlands, 1995; Sen 1995; Strzelecka et al., 2017). Indeed, the subject of power has also been considered by theorists such as Foucault (1989), Giddens (1994), Fraser (1989) Harding (1995), and Hartsock (1998).

Individual and group empowerment through increasing people's capabilities to manage and control the issues has been considered by several statesmen. In this regard, control over issues includes, on one side, control over accessible resources such as natural, human, financial, and mental aspects, and, on the other, control over behavior, values, and ideas. (Cornwall, 2016; Saito & Ruhanen, 2017). Delegation of authority and power to local stakeholders of tourism results in the preparation of an opportunity for their participation in the education of knowledge and participatory cooperation as active and 'subjective' and not solely consuming and 'objective' (Joo et al., 2020; Perkins & Zimmerman, 1995). Improving the power level of local stakeholders of tourism in the process of generative empowerment, based on Blau (1964) and Rowland (1995), in addition to increasing their control over life and democratic participation in their socio-economic activities, encourages them to provide strategies to overcome the challenges of tourism development (Mayaka et al., 2019; Rowlands, 1995). Therefore, based on Rowland's (1995) view, in the empowerment process, power is restricting or encouraging participation in different activities. (Knight & Cottrell, 2016; Rowlands, 1995). On this basis, empowerment can emerge in the 'generative' (subjective) or 'non-generative' manner (objective). Therefore, using facilitators for empowerment, and expansion and delegation of power, help in the transition from 'power over' (authority) situation which creates many limitations for influence and participation of local stakeholders in different issues to 'power with', 'power within' and subjective for their influence and participation in the process of sustainable development of tourism (Knight & Cottrell, 2016).

Based on the related literature, educating and informing local stakeholders on the benefits and costs of tourism development, fostering local knowledge and skills to benefit from various job opportunities, facilitating access to financial and non-financial resources, paying attention to the form of local institutions as empowerment approaches lead to their enhanced perceived value of multiple benefits of tourism development (Fernández-Moral et al., 2015; Suarathana & Hardini, 2015) and provide the grounds for their active participation in diverse tourism activities (Sebele, 2010). Also, transferring ownership of tourism services to local stakeholders plays an important role in empowering them and changing their attitudes towards accepting responsibilities (Mtapuri & Giampiccoli, 2016).

Since the 1980s, the empowerment of local tourism stakeholders was considered in planning the development of countries to establish social and spatial justice and to overcome the challenges posed by the irresponsible socio-economic and environmentally damaging tourism development (Sharpley, 2009; Đukić & Volić, 2017). This approach seeks to increase the awareness and perceived environmental impacts of local tourism stakeholders to use and conserve locally available resources fairly and equitably, thus contributing to their participation in tourism development and continuous transformation to perpetuate tourism benefits and improve local environmental qualities (Giampiccoli, 2015). In other words, empowering local tourism stakeholders changes their perceived attitude and value of tourism development, and is also a key factor in enabling local stakeholders to positively influence sustainable tourism development (Hamilton & Matthew, 2013; Strzelecka, 2011).

Although several studies examined the empowerment of local stakeholders in sustainable tourism development and also investigated tourism impacts and tourism development, few studies have simultaneously examined the relationship between improving the dimensions of local tourism empowerment impacted by environmental including environmental-ecological, economic, their social, and cultural factors perceived by tourism development and participation in the process of

sustainable tourism development. In other words, in the area under study, empowerment was carried out by several organizations, without their coordination, and in a non-generative manner. Whereas Blau (1964) and Rowland (1995) hold that empowerment can have a considerable effect on raising the power of tourism's local stakeholders and prepare the ground for a behavior change of local stakeholders from objective to subjective. However, in the area under study in Iran, due to the sectional approach of the organizations in charge and weak cooperation among them, the empowerment process was carried out in a non-generative manner based on 'power over' or 'authority'. To bridge the gulf (both under the conditions for empowerment measures in the area under study and to research in the field) and considering the importance of the role of local stakeholders in the sustainable development of tourism, the distinguishing approach of this study, which was used to address this gap, identified the contribution of empowerment dimensions of local tourism stakeholders as independent and influential variables, improved the environmental dimensions perceived by local tourism stakeholders as the mediator variable for their socio-economic participation in the process of sustainable tourism development and improved its dimensions in tourism route and destinations as the final dependent variable.

Therefore, the main research problem addressed what effects the empowerment of local stakeholders affected by the environmental impacts (including environmental-ecological, economic, social, and cultural) perceived by tourism development has had on their participation in the process of sustainable tourism development? To address this main research problem, the secondary research questions are as follows.

- 1 What is the effect of the empowerment of local tourism stakeholders on the perceived ecological environment of tourism development?
- 2 What is the effect of the empowerment of local tourism stakeholders on the perceived socio-cultural impacts of tourism development?
- 3 What is the effect of the empowerment of local tourism stakeholders on the perceived economic impacts of tourism development?
- 4 Have the perceived environmental-ecological impacts of local stakeholders of tourism development been effective in their participation in tourism sustainable development?
- 5 Have the perceived socio-cultural impacts of local stakeholders of tourism development been effective in their participation in tourism sustainable development?
- 6 Have the perceived economic impacts of local stakeholders of tourism development been effective in their participation in tourism sustainable development?
- 7 And finally, is there a relationship between the empowerment of tourism local stakeholders with a mediating effect of perceived environmental impacts of tourism development and their participation in the process of tourism sustainable development?

To answer these questions, seven main hypotheses were tested. But before addressing the research hypotheses, the present paper explored the concepts related to the empowerment of local tourism stakeholders in the previous literature and thus provided the basis for the conceptual framework and research hypotheses to answer the questions.

Based on what was discussed, the empowerment of local stakeholders is effective on the perceived environmental impacts of tourism development. In other words, empowerment is an empowering process for societies, that is, changing human behaviors and actions to achieve the desired goals in various scientific fields to organize environmental responses and take innovative actions at various levels such as non-profit organizations, national governments, and international organizations (Mechanic, 1991; Strzelecka et al., 2017; Wallerstein, 2006).

On this basis, empowerment is a structure that links the individual and social strengths and competencies, the natural environment, and responsible behaviors of individuals in the socio-cultural, economic, and environmental-ecological aspects of tourism development (Rappaport, 1984; 2002) and reinforces people's perception of their individual,

social, and natural environment capabilities and provides the grounds for constructive communications and exploitation of the environment (Boley et al., 2014; Lee, 2013). In this connection, Rowland (1995) notes that in the empowerment dialog, the concept ‘power within’ means the ability to do the work or, in other words, the power to do work (Alkire, 2008; Rowlands, 1995). Moreover, he has described the activity arising from violent coercion, force, and authority as ‘power over’ (Allen et al., 2016). In terms of ‘power over’, empowerment means to be generative, and increasing a person’s power does not necessarily reduce another one’s power (Rowlands, 1995). In this respect, ‘power within’ focuses on the reinforcement of empowerment processes more at the individual level and means that the person can change the current condition or reduce the limitations. (Richardson-Ngwenya et al., 2019).

It also empowers people and societies to be responsive to their life issues and provides the conditions for their transition from passive (Objective) and consumer man to responsive (Subjective) and productive man (Muigua, 2015). Developing local stakeholder empowerment at its lowest level through education enables communities to engage and participate in upcoming changes and increases their control through awareness of personal, social, and environmental resources and related issues (Ramos & Prideaux, 2014). Depending on the type of training provided, local stakeholders are divided into two types of “Subjective” and “Objective”. Objective stakeholders do not reach self-awareness and therefore cannot influence their environment, and, as a result, they fail in active socio-economic participation and in affecting their surrounding environment.

In contrast, Subjective stakeholders can build and improve the environment in line with their goals. On this basis, the training should be in a way that integrates the local stakeholders’ skills and knowledge along with specialist workforce knowledge to enable and enhance the understanding, finding the right solution to their environmental issues in equal circumstances (Jørgensen & Thoning, 2017; Muigua, 2015).

In recent years, raise the awareness and improvement of knowledge and skills has been considered as one of the dimensions of stakeholder empowerment in various disciplines including tourism. Local tourism stakeholders enhance their intrinsic abilities to achieve the desired goals by raising awareness and acquiring knowledge and skills (Abbott, 2014). In other words, stakeholders with the required knowledge and skills strive to manage and benefit from their living environment to achieve their goals by understanding the environment and responding to the situations. They learn the three “technical, behavioral, and perceptual” skills to achieve socio-economic empowerment (Green, 2008). Also, having access to job opportunities, and financial, human, and environmental resources are some of the empowerment components of local stakeholders (Aghazamani & Hunt, 2017) that can influence their perception of participation in tourism development. For instance, in developing countries, lack of knowledge and skill as well as economic, traditional, and religious issues are introduced as dissuasive factors in the participation of stakeholders in tourism. (Kunasekaran et al., 2017). Therefore, the present study concludes that generative empowering local tourism stakeholders will be effective in enhancing their perceived environmental impacts for contributing to sustainable tourism development. Based on what was discussed above, hypotheses 1–3 were inferred as follows:

Hypothesis 1. Empowering local tourism stakeholders has a positive effect on the perceived environmental-ecological impacts of tourism development.

Hypothesis 2. Empowering local tourism stakeholders has a positive effect on the perceived socio-cultural impacts of tourism development.

Hypothesis 3. Empowering local tourism stakeholders has a positive effect on the perceived economic impacts of tourism development.

Therefore, empowering local tourism stakeholders has a positive effect on the perceived environmental impacts of tourism development.

Furthermore, about the environmental impacts perceived by local

stakeholders and the participation in tourism development, one can say that tourism has positive and negative environmental impacts on the lives of local stakeholders such as environmental-ecological, socio-cultural, and economic impacts. When tourism benefits outweigh its costs, they try to increase the benefits to improve their quality of life by participating in tourism development (Chen et al., 2018; Dichter & Manzo, 2017, pp. 1–62; Noordeloos, 2018). Therefore, empowering and improving the perceived environmental impacts of local tourism stakeholders can promote tourism development.

Ensuring the positive economic impacts concerning local stakeholders’ income is essential in the development process. Khartishvili et al. (2019) noted tourism development should be such that increase the income of local stakeholders in addition to reducing poverty in rural settlements (Khartishvili et al., 2019). Thus, economic growth is one of the most well-known positive effects of tourism in rural settlements, which, increases income and thus improves the quality of life of local stakeholders through the diversity of employment (Butler, 2017). The negative effects of tourism development can be higher living costs, economic dependency, increased taxation, etc. (Kim et al., 2014).

Besides, Tourism development has positive social impacts too, including changes in the lifestyle of local stakeholders, the preservation of social customs and cultural values, the recognition of the place as a tourism destination (Aghazamani & Hunt, 2017). Thus, tourism development in rural settlements improves social welfare, enhances cultural centers, highlights social values, and enhances local pride (López et al., 2018). In other words, the interactions of different departments to provide services to tourists reinforce relationships between local stakeholders for benefiting from tourism interests (Jani, 2018). In this respect, in developing countries, the development of tourism is regarded as an economic generator to reduce poverty and increase income which is achieved through the formation of awareness organizations to preserve cultural heritage and reinforce stakeholders’ relations with the surrounding environment. (Adu-Ampong, 2017). Whereas in the developed countries, the generative empowerment of local tourism stakeholders has been achieved through enhancing their ability to take responsibility and participate in sustainable tourism development. Increasing the awareness of local tourism stakeholders has strengthened relationships and confidence among them, and this has led to their collaboration to benefit from each other’s creativity and teamwork (Lindström & Larson, 2016). However, tourism development can also have negative social effects such as changes in local stakeholder culture, crime, and population density (Zhuang et al., 2019). The development of tourism for the natural environment is like a double-edged sword. If the development is properly directed by local stakeholders aware of environmental issues, it can lead to preserving biodiversity and contributing to the sustainability of natural resources in the long run. Otherwise, tourism development will lead to environmental degradation and the destruction of the attractiveness of the area in the short-run (Butler, 2017). In this regard, international organizations focused on the preservation of rural settlements in the 1970s during the development of environmental tourism (Holden, 2016). On this basis, when local tourism stakeholders become aware of the benefits of tourism, they strive to preserve the environment for the long-term benefits (Burgos & Mertens, 2017).

On this basis, the participation of local stakeholders in the process of tourism development can take various forms such as coercive participation, induced participation, and spontaneous participation. Empowering local tourism stakeholders helps local communities participate spontaneously in tourism development. Spontaneous participation focuses on a bottom-up approach to empowerment; it considers development appropriate through empowerment and participation of local stakeholders through education, local knowledge and insight and accessibility of resources leading to control and guidance through local people (Breugel, 2013).

Given what was discussed, hypotheses four to six are inferred.

Hypothesis 4. The perceived environmental-ecological impacts of local stakeholders of tourism development are effective in their participation in sustainable tourism development.

Hypothesis 5. The perceived socio-cultural impacts of local stakeholders of tourism development are effective in their participation in sustainable tourism development.

Hypothesis 6. The perceived economic impacts of local stakeholders of tourism development are effective in their participation in sustainable tourism development.

As to the subject of empowering the local stakeholders and their participation in the development of tourism, it can be added that empowerment of local tourism stakeholders through increasing their capabilities and giving them the freedom to operate and manage tourism affairs has been the focus of. Therefore, Authorizing and empowering local tourism stakeholders provide an opportunity for participants to foster knowledge and cooperate with consumerism (Perkins & Zimmerman, 1995).

Thus, power limits or encourages local tourism stakeholders to participate in activities in the process of empowering (Knight & Cottrell, 2016). On this basis, empowerment commensurate with the structure of power can be either generative or non-generative. Hence, applying facilitators of empowerment and expanding the power of local tourism stakeholders helps transition from a state dominance and coercion who have many constraints on influencing and participating in various issues to a self-reliant and self-conscious and state for the local tourism stakeholders to influence and participate in the process of sustainable tourism development. However, for generative empowerment of local stakeholders, attention should be paid to facilitators such as education and awareness-raising, accessibility of resources, expansion of group ownership, promotion of accountability, and local control as the most important effects of change, transformation, and transition from “non-generative empowerment” to “generative empowerment” (Table 1) for the better provision of tourism services to tourists and improved dimensions of sustainable tourism development (Knight & Cottrell, 2016) (Table 2).

Therefore, the need to consider empowerment is essential to participate in the process of sustainable tourism development (McCool & Bosak, 2016). Many studies have been conducted on the effects of empowering local tourism stakeholders on their participation in sustainable tourism development. In Brazil, policymaking intended to distribute power to build grassroots organizations and networks and to improve the status of local tourism stakeholders, and to create equal access opportunities for all members of the organization increased self-esteem and self-reliance. It has provided the members of the organizations with the opportunity to actively participate in the process of sustainable tourism development (Burgos & Mertens, 2017). Similarly, the development of participatory tourism for the sustainable development of local settlements in Poland emphasized the supportive and guiding role of government in empowering local tourism stakeholders to succeed in tourism development (Strzelecka et al., 2017). In this way, European and American countries are working to improve the sustainability of tourism by enhancing the indicators of empowering local tourism stakeholders.

In Kenya, due to top-down policies and lack of trust, local stakeholder’s participation in tourism activities has been non-generative.

Table 1
The position of power, empowerment, and local stakeholders’ participation.

Type of power	Primary focus	Description of the empowerment process	Type of participation of tourism local stakeholders
Power over	Dominance (coercion)	Compulsory activity (non-generative)	Passive participation (workable man)
Power on	Agency (dependency)	Performing the activity unconsciously (generative)	Communication
Power with	Collective partnership	Performing activities in response to individual and social needs (generative)	Active participation
Power within	self-reliance (independence)	Performing the activity consciously (generative)	Empowerment (working man)

Source: Rowland’s Power Theory 1997 and an analysis of related literature, 2019

Therefore, awareness and promotion of knowledge and skills of the local poor and illiterate stakeholders have been emphasized (Mayaka et al., 2018). Because state-led tourism development and the lack of attention to community-based and appropriate approaches to empower local stakeholders to overcome the economic problems caused by unemployment have created various challenges in the dimensions of sustainable local development and tourism in many African countries (Chili & Xulu, 2015; Shafiei Sabet & Haratifard, 2017; Unwto, 2018). In other words, research in Africa indicates that tourism has always been considered as a source of income for poverty alleviation. However, the lack of proper infrastructures for tourism development, inequality in the distribution of power, and state-led authorization have been central factors in the inability of local stakeholders to participate in tourism. Therefore, the application of an appropriate empowerment approach for equitable distribution of power and tourism development by local stakeholders has been emphasized to achieve self-reliance and improved quality of life (Giampiccoli & Saayman, 2017).

Building on what was discussed, the fourth hypothesis was formulated as follows:

Hypothesis 7. Empowering local tourism stakeholders indirectly affects their participation in tourism development.

2. Conceptual model

To examine the empowering role of local stakeholders in enhancing their participation in the process of sustainable tourism development with a mediating role of the perceived environmental-ecological, socio-cultural, economic impacts of tourism development, Fig. 1 was modeled as a general framework for defining the relationships between independent and dependent variables of the study.

3. Research method and location of the study

To assess the empowering role of local stakeholders in enhancing their participation in the sustainable tourism development process with a mediating role of perceived environmental impacts of tourism development, rural settlements of routes and destination in the Karaj-Chalus road tourism area was selected as the tourism target village of the study (Fig. 2). The selection of villages in this area was done for a variety of reasons. First, Iranian rural centers with diverse natural, historical, and cultural attractions are located around metropolitan areas with an extremely demographic and economic focus, thus establishing Tehran and Karaj metropolises nearby. The study area - and the need for citizens of these metropolises to spend their free time - annually attracts a large number of tourists in addition to individual or group out-of-region tourists.

The second reason was the geographic specificity of the study area with its diverse climate and landscape. These rural centers are of interest to summer and winter tourism enthusiasts. Third, these rural centers in the study area are like a bridge between Tehran and the northern cities of Iran passing many travelers to northern areas throughout the year. The fourth reason was the widespread changes that have taken place in all the environmental, ecological, social, and economic aspects of sustainable development of the rural settlements of the study area through tourism development.

Besides, centers offering training courses in Iran have become official

Table 2
Centers offering training courses for the empowerment of tourism local stakeholders.

Description	Name of organization	Courses held							
State official centers	Cultural Heritage, Handicrafts, and Tourism Organization of Iran	Tour management	Tour Guide	Restaurant	Hotel Industry	Confectionery	Handicrafts		
	Endowment and Charity Affairs Organization	Introduction to Pilgrimage Centers and Shrines	Pilgrimage Tour Guide	AA Pilgrimage Tour Guide					
	University of Applied Science and Technology	Tour Management	Tour Guide	Restaurant Management	English Language	Catering Courses	Hotel Industry	Tourism Management	Tourism Marketing
Semi-official and unofficial centers	Association of Tour Guides	Group Workshops on Tourist Attractions							
	Mountaineering and Sports Tour Leaders' Federation	Ski Training Courses	Mountain Climbing, Rock Climbing, and Ice Climbing						

Source: Findings of the present study, 2019

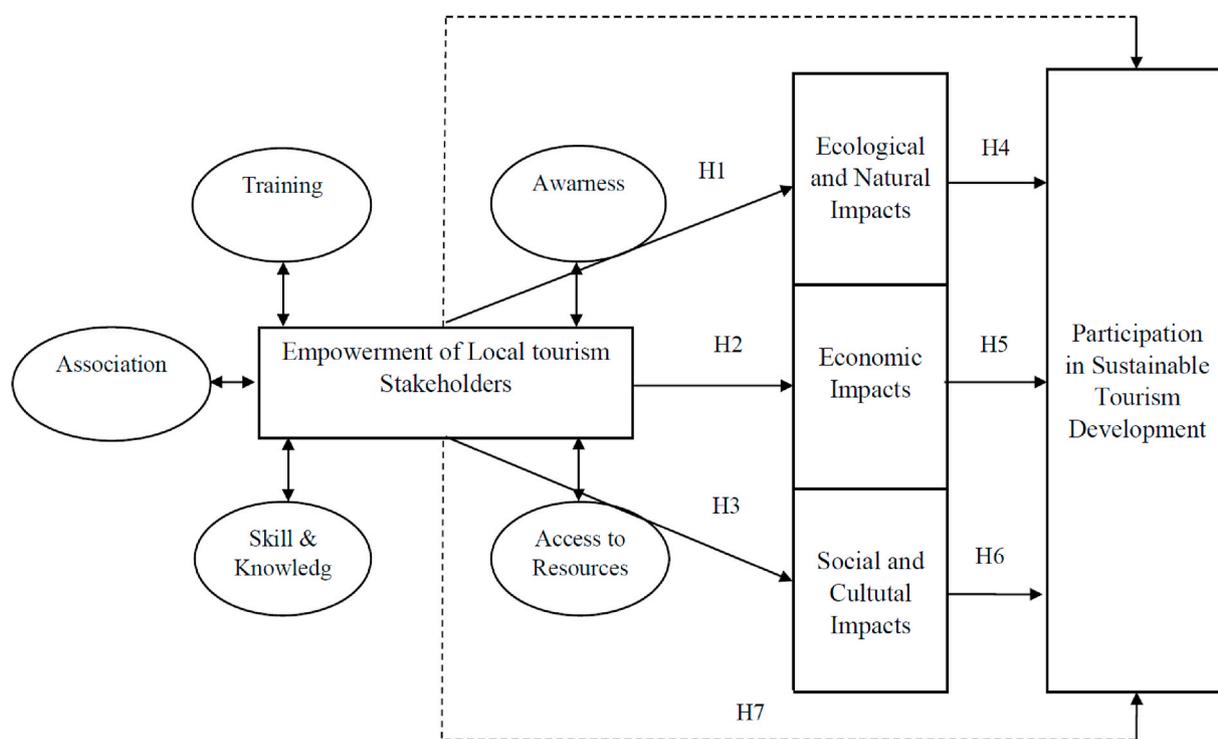


Fig. 1. Conceptual model of the study, Source: research findings, 2019.

or state-led or and semi-formal centers for tourism development, which have been the focus of local stakeholders' participation in tourism development.

Therefore, understanding the role of these centers in improving the empowerment of local tourism stakeholders to participate in social and economic activities, and assessing the views of the local community on their performance contribute to improving the social and economic life of the community and reveals the relationship between the tasks described by local tourism stakeholders, empowerment and improvement of indicators in the sustainable tourism development process in developing countries similar to Iran. Therefore, the debate has focused on the empowerment and participation of the local community to meet current and leading social and economic challenges, at a broader level, at the community level, and in academic and administrative circles of

Iran in recent years. The application has become indispensable and important in various fields.

Based on such necessity, the present research focused on the contribution of training centers to the performance of local tourism stakeholders and the improvement of empowerment in the process of sustainable tourism development, however, this paper only analyzed the contribution of empowering local tourism stakeholders and their participation in social and economic activities in the process of sustainable tourism development.

The present study was an applied descriptive-survey research study concerning the purpose and the data collection. This study investigated the effects of empowering local tourism stakeholders on their participation in sustainable tourism development in the area under study through a descriptive-analytical method.

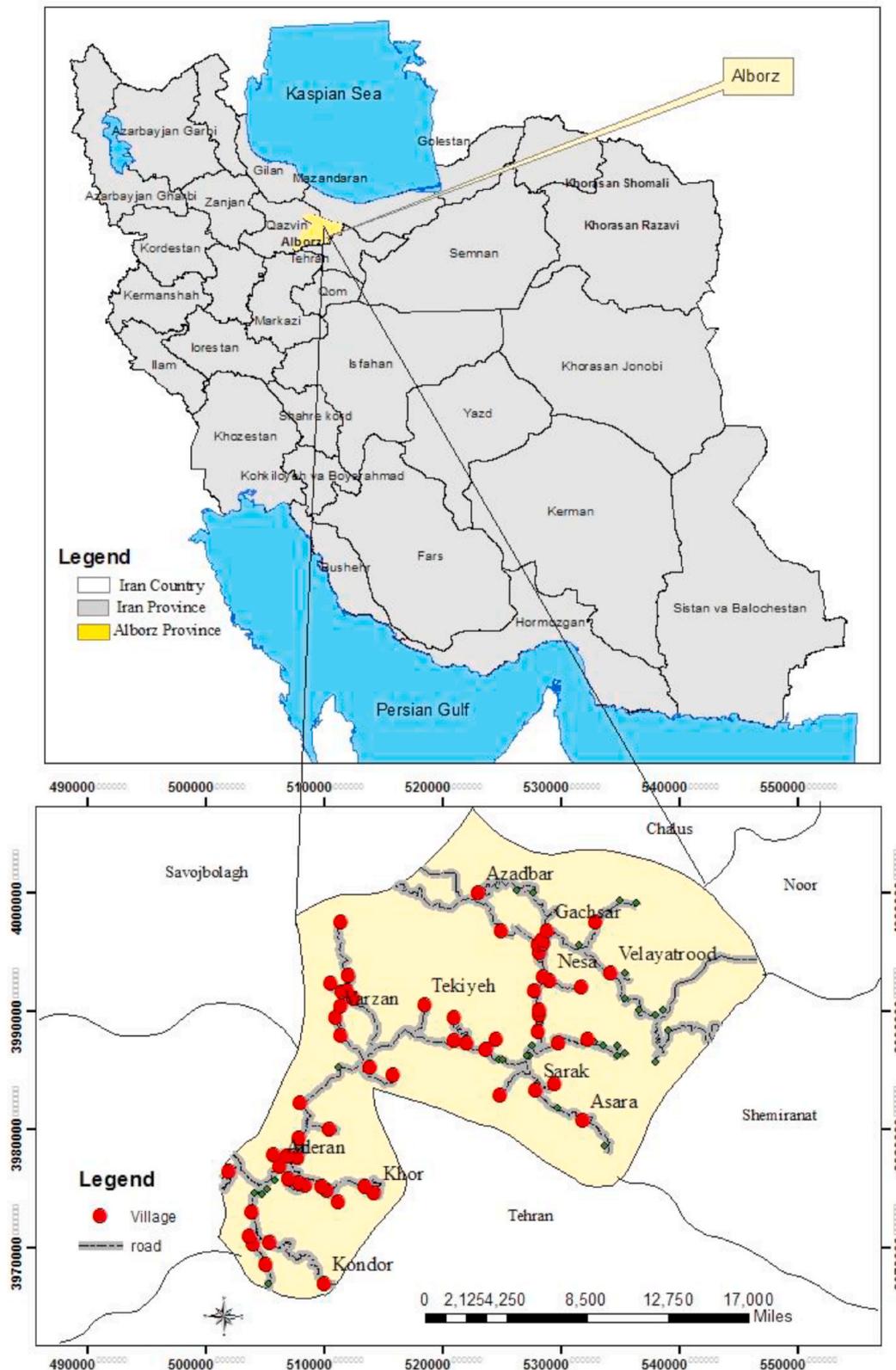


Fig. 2. Villages under study.

The statistical population of the study included the owners of 460 accommodation and catering centers and the retail and wholesale centers in the tourist route and destination (local stakeholders).

These centers were identified through in-person visits and data from the Cultural Heritage and Tourism Organization in 2019. The sample

size calculated for the stakeholders was 209 samples based on Cochran's formula (Sarai, 2014), with a 95% confidence level, and 0.25 ($0.5 * 0.5$), variance prediction, and 5% optimal probability accuracy. The number of samples increased to 230 random samples (equal to 50% of the statistical population) to better cover the accommodation and catering

centers and the retail and wholesale centers in the tourist route and destination, and they were directly questioned. Therefore, according to the central limit theorem, the sample size can be generalized to the whole statistical population, because it is more than 30 samples from the population (Kothari, 2004; 2017). It is noteworthy that in the statistical population under study, out of 460 owners of accommodation and catering centers, 52 people (11.3%) were female and 408 people (88.7%) were male. The probability proportional to size method was used for the sampling in both the male and female groups (Ibid). Therefore, with the 11.3% proportion of the female statistical population, the random sample size of 26 samples was obtained. When completing the questionnaire, according to the characteristics of local tourism stakeholders, one sample (0.3%) was added to the number of female respondents. In this way, the sample size for females was 27 samples out of a total of 52 people in the statistical population, which is equivalent to 11.6%. In contrast, 203 male respondents were calculated accordingly.

A questionnaire was used to collect field data. Various studies were used to design the questionnaire based on the situation of Iranian society. In this regard, 19 questions according to Table 3 were used from different researchers to evaluate different aspects of empowering local tourism stakeholders. To assess the perceived environmental impacts of local stakeholders from implementing tourism development plans to participate in the sustainable tourism development process, 23 questions were evaluated according to Table 4. To ensure consistency of the questions from previous studies with the research variables in the host community and to determine the face validity of these indices and their adaptation to the conditions of Iran and the villages of the study area in terms of the importance of independent and dependent variables, 12 academic lecturers and researchers at various universities in Iran and 10 managers and experts of related organizations and institutions such as Cultural Heritage and Tourism Organization of Iran, Alborz Province and Tehran, and centers providing different tourism courses for local stakeholders were assessed according to Table 4. The questionnaire was corrected after receiving their feedback and some unimportant questions were eliminated. Accordingly, the final variables and indicators affecting the empowerment process of local tourism stakeholders (Table 3) were presented as the independent variable, and their impacts were assessed on their participation in the sustainable tourism development process (Table 4) with a mediating role of environmental impacts perceived by local tourism stakeholders in the rural settlements of the study area. Indicators were rated on a Likert Scale ranging from (very low to very high).

Statistical methods used in this study were correlation analysis using SPSS software and Structural Equation Modeling (SEM) using PLS and SMART PLS 3 Software. As one of the most comprehensive statistical approaches, Structural Equation Modeling (SEM) was used to test hypotheses and the relationships between latent and observed variables (Hoyle, 2012). The assessment of Structural Equation Modeling was performed in two stages; the first step was to evaluate the external measurement model where the reliability and validity of the model were determined using (CFA) factor analysis. At this stage, (AVE) construct validity was used to check the validity of the variables, and (CR) composite reliability and Cronbach's Alpha were used to evaluate the reliability of the instruments. If t is significant at one to five percent level and simple validity is higher than 0.5, construct validity is desirable. The desirability of reliability is obtained when $CR > 0.6$ and Cronbach's Alpha Coefficient is greater than 0.7. Based on the results of Table 6, the reliability and validity of the questionnaire were desirable. Therefore, the hypotheses and the relationships between variables were tested using the structural model.

4. Research findings

Descriptive findings showed that out of 230 respondents, 11.6% were female and the rest were male. Moreover, about 82.2% of the

Table 3
Latent and observed variables of the process of empowering local tourism stakeholders.

Latent variable	Observed variable	Authors	Acronym
Education (Implementation of training courses in the following fields)	Tourism welfare and support services	Strzelecka, 2011; Jørgensen & Thoning, 2017; Mak et al., 2017; Kunasekaran et al., 2017; UNWTO, 2018	AQ1
	Environmental protection and the use of modern energies	Strzelecka, 2011; Muigua, 2015; Burgos & Mertens, 2017;	AQ2
	New Marketing Methods	Burgos & Mertens, 2017; Jørgensen & Thoning, 2017; UNWTO, 2018	AQ3
	Benefiting from local resources	Lindström and Larson (2016)	AQ4
	Clean tourism	Giampiccoli & Saayman, 2017; UNWTO, 2018	AQ5
Awareness-raising	Citizenship awareness	Lindström & Larson, 2016; Jørgensen & Thoning, 2017; Strzelecka et al., 2017; UNWTO, 2018	BQ1
	Awareness of available environmental resources	Strzelecka, 2011; UNWTO, 2018	BQ2
	Awareness of the principles of sustainable tourism development	UNWTO, 2018;	BQ3
	Awareness of the negative effects of tourism	Jørgensen & Thoning, 2017; Giampiccoli & Saayman, 2017; Strzelecka, 2011;	BQ4
Skill	Local industry skills	Jørgensen & Thoning, 2017; Mtapuri & Giampiccoli, 2016; Jørgensen & Thoning, 2017; Kunasekaran et al., 2017;	CQ1
	Skills in utilizing new technology and energies	Mtapuri & Giampiccoli, 2016; UNWTO, 2018;	CQ2
	Skills in providing tourism services to tourists	Strzelecka, 2011; Mtapuri & Giampiccoli, 2016; Muigua, 2015; Burgos & Mertens, 2017; Kunasekaran et al., 2017; UNWTO, 2018;	CQ3
Accessibility	Access to physical, social, and economic resources	Mtapuri & Giampiccoli, 2016; Muigua, 2015; Jørgensen & Thoning, 2017; Burgos & Mertens, 2017; Kunasekaran et al., 2017;	DQ1
	Access to technology, information, and infrastructure	Mtapuri & Giampiccoli, 2016; Jørgensen & Thoning, 2017; Burgos & Mertens, 2017; Kunasekaran et al., 2018;	DQ2
	Access to financial and non-financial resources	Mtapuri & Giampiccoli, 2016; Muigua, 2015; Burgos & Mertens,	DQ3

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Table 3 (continued)

Latent variable	Observed variable	Authors	Acronym
Formation of organizations	Access to skilled human resources for tourism	2017; Kunasekaran et al., 2017; UNWTO, 2018; Kunasekaran et al., 2017; UNWTO, 2018;	DQ4
	Willingness to form organizations	UNWTO, 2018;	EQ1
	Willingness to participate in tourism organizations	Lindström & Larson, 2016; Muigua, 2015; Jørgensen & Thoning, 2017; Burgos & Mertens, 2017	EQ2
	Satisfaction with membership in organizations	UNWTO, 2018;	EQ3

Source: Previous literature, 2019

respondents had education higher than a high school diploma. In general, the highest frequency of respondents was in the age group of 35–44 (Table 5).

Convergent validity indices, Cronbach’s Alpha, and composite reliability of mean responses were measured according to Table 6. Cronbach’s Alpha measures the simultaneous loading of latent variables when increasing an observed variable, and the composite reliability (Levin Goldstein) is the total amount of true score variance relative to the total scale score variance. The reliability of the questionnaire was confirmed by Cronbach’s Alpha values above 0.7 and composite reliability by CR values > 0.6.

Convergent validity means that the indices of each construct provide an appropriate measurement separation from other model constructs. In other words, each index only measures its structure, and its composition is such that all structures are well separated. Therefore, this test examines the convergence of the indices that measure the model variables. Average Variance Extracted (AVE) index revealed that all the studied structures had an average extracted variance higher than 0.5. Also, all values of factor loadings (t) at 5% are above the 1.96 level and thus significant. On this basis, the validity of the study was confirmed.

The coefficients show the correlation between the research variables (Table 7). In the original diameter of the matrix of numbers, one represents the corresponding correlation of a variable with itself; the absolute value of the larger values indicates greater correlation. As can be seen, all correlation coefficients are positive and significant at the 5% error level. Among empowerment indices, accessibility to resources with a coefficient of 0.093 has a strong relationship with the participation of local tourism stakeholders in sustainable tourism development; and knowledge and skills variable with a coefficient of 0.162 are mostly correlated with the empowerment of local tourism stakeholders. Also, examining the correlation of environmental (environmental-ecological, economic, and socio-cultural) perceived impacts of tourism development with each of the indicators of empowerment and participation in sustainable tourism development revealed that perceived socio-cultural impacts of tourism development with each empowerment indicator were far more than other perceived effects.

According to the research conceptual model and hypotheses, structural equations in the standard coefficient’s estimation model showed that empowerment variables of local tourism stakeholders are effective and exogenous factors, and environmental-ecological, economic, and socio-cultural variables of perceived tourism development are intermediary variables, and participation in sustainable tourism development is an effective and endogenous variable. According to Fig. 3, the exterior measurement model of the research presented the observed and latent variables in the standard coefficient estimation mode and also the significance of coefficients.

Table 4

The process of indexing the concept of perceived environmental impacts, the participation of local stakeholder, and sustainable tourism development.

Latent variable	Observed variable	Authors	Acronym	
Perceived environmental-ecological dimensions	Improved protection of natural resources	Strzelecka, 2011; Mtapuri & Giampiccoli, 2016; Muigua, 2015; Lindström & Larson, 2016; Jørgensen & Thoning, 2017; Kunasekaran et al., 2017; UNWTO, 2018	GQ1	
	Improving rural landscapes	Strzelecka, 2011; Mtapuri & Giampiccoli, 2016; Muigua, 2015	GQ2	
	Improving the quality of the environment	Saayman, 2017; Muigua, 2015; Lindström & Larson, 2016; Burgos & Mertens, 2017; Strzelecka et al., 2017; Giampiccoli & Saayman, 2017	GQ3	
	Improving biodiversity	Mtapuri & Giampiccoli, 2016; Giampiccoli & Saayman, 2017, UNWTO, 2018	GQ4	
	Improving plant species	Giampiccoli & Saayman, 2017; UNWTO, 2018; Burgos & Mertens, 2017;	GQ5	
	Improving animal life	Mtapuri & Giampiccoli, 2016; Burgos & Mertens, 2017; Giampiccoli & Saayman, 2017;	GQ6	
	Perceived socio-cultural dimensions	Improving the quality of life through opportunities for education, training, services, etc.	Muigua, 2015; Burgos & Mertens, 2017; Adu-Ampong, 2017; Kunasekaran et al., 2017; UNWTO, 2018	IQ1
		Improving the quality of cultural buildings	Mtapuri & Giampiccoli, 2016; Muigua, 2015; Burgos & Mertens, 2017; Kunasekaran et al., 2017	IQ2
		Improved interactions with tourists	Mtapuri & Giampiccoli, 2016; Lindström & Larson, 2016; Strzelecka et al., 2017; Adu-Ampong, 2017; UNWTO, 2018;	IQ3
		Reducing migration and increasing population	Mayaka et al., 2018; Kunasekaran et al., 2017;	IQ4
Improving the status of organizations		Mtapuri & Giampiccoli, 2016; Jørgensen & Thoning, 2017; Strzelecka et al., 2017; Mayaka et al., 2018; Kunasekaran et al., 2017;	IQ5	
Improving partnerships (collective partnership)		Mtapuri & Giampiccoli, 2016; Strzelecka et al., 2017, Giampiccoli & Saayman, 2017; Adu-Ampong, 2018;	IQ6	

(continued on next page)

Table 4 (continued)

Latent variable	Observed variable	Authors	Acronym
	Improving native culture	Burgos & Mertens, 2017; Strzelecka et al., 2017; Giampiccoli & Saayman, 2017; Kunasekaran et al., 2017; UNWTO, 2018	IQ7
	Strengthening cultural pride	Muigua, 2015; Strzelecka et al., 2017; Giampiccoli & Saayman, 2017;	IQ8
	Expanding diverse cultural activities	Muigua, 2015; Strzelecka et al., 2017, Giampiccoli & Saayman, 2017; Kunasekaran et al., 2017;	IQ9
Perceived economic dimensions	Improvements in handicraft and workshop production	Mtapuri & Giampiccoli, 2016; Muigua, 2015; Strzelecka et al., 2017, Kunasekaran et al., 2017;	HQ1
	Improvement in agricultural production	Mtapuri & Giampiccoli, 2016; Muigua, 2015; Burgos & Mertens, 2017; Kunasekaran et al., 2017;	HQ2
	Improving tourist services	Mtapuri & Giampiccoli, 2016; Muigua, 2015; UNWTO, 2018	HQ3
	Improving investment level	Muigua, 2015; Lindström & Larson, 2016; Strzelecka et al., 2017; Giampiccoli & Saayman, 2017; Mayaka et al., 2018;	HQ4
	Improved income level	Muigua, 2015; Lindström & Larson, 2016; Burgos & Mertens, 2017; Jørgensen & Thoning, 2017; Giampiccoli & Saayman, 2017; Mayaka et al., 2018; UNWTO, 2018	HQ5
	Improving the quantity and quality of employment	Muigua, 2015; Lindström & Larson, 2016; Burgos & Mertens, 2017; Jørgensen & Thoning, 2017; Strzelecka et al., 2017, Giampiccoli & Saayman, 2017; Mayaka et al., 2018;	HQ6
	Improving the diversity of job opportunities	Muigua, 2015; Lindström & Larson, 2016; Burgos & Mertens, 2017; Strzelecka et al., 2017; Giampiccoli & Saayman, 2017; UNWTO, 2018	HQ7
Participation in the process of sustainable tourism development	Participation in social and economic activities of tourism	Strzelecka et al. (2017)	KQ1
	Partnership for environmental protection	Mtapuri & Giampiccoli, 2016;	KQ2
	Participation in investment in	Burgos & Mertens, 2017;	KQ3

Table 4 (continued)

Latent variable	Observed variable	Authors	Acronym
	educational infrastructure Participation in the use of modern energy in residential and catering centers	Jørgensen & Thoning, 2017;	KQ4

Source: Previous literature, 2019

Table 5

Respondents' information in the study area.

Characteristic	Tourism local stakeholders		
	Frequency	Percentage	
Gender	Male	203	88.4
	Female	27	11.6
Education	Elementary	6	2.6
	Secondary	7	3.0
	High school and diploma	28	12.2
	AA and BA	182	79.1
Age	MA and higher	7	3.1
	20–24	11	4.8
	25–34	58	25.1
	35–44	91	39.6
	45–54	54	23.5
	55–64	14	6.1
65–74	2	0.9	

Source: Findings of the present study, 2019

Table 6

Convergent validity indices and reliability of research variables.

Latent Variable	Cronbach's Alpha	rho_A	Composite Reliability (CR)	AVE	R ²
Education	0.837	1.041	0.872	0.580	0.004
Awareness-raising	0.858	1.079	0.891	0.678	0.012
Knowledge and skills	0.759	0.860	0.853	0.661	0.026
Accessibility to resources	0.897	0.864	0.918	0.739	0.009
Forming organizations	0.809	1.600	0.856	0.669	0.004
Perceived environmental-ecologic impacts	0.876	0.895	0.905	0.613	0.062
Perceived socio-ecologic impacts	0.922	0.933	0.937	0.712	0.050
Perceived economic impacts	0.919	0.925	0.937	0.712	0.070
Participation in tourism sustainable development	0.861	0.874	0.905	0.705	0.075

Source: Findings of the present study, 2019

By applying the results to the conceptual model of the research, the structural equation model was obtained by estimating the standard coefficients (Fig. 3). In the structural equation model, the coefficients between the latent variables and the observed variables are outer loads. In the measurement model, the relationships between observed and latent variables are revealed. The numbers inside the circles or latent variables represent the coefficient of determination. The coefficients between the latent variables are interconnected which includes the research hypotheses. In the present model, the variables of empowerment of local tourism stakeholders, as influential and exogenous factors, and the variables of perceived environmental-ecological, economic and socio-cultural impacts of tourism development, as mediating variables, and participating in sustainable tourism development, are dependent and endogenous variables. The results of the measurement model

Table 7
Correlation matrix of research variables.

Latent Variable	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
(a) Perceived environmental-ecologic impacts	1									
(b) Perceived economic impacts	0.643	1								
(c) Perceived socio-ecologic impacts	0.631	0.922	1							
(d) Education	-0.090	-0.079	-0.070	1						
(e) Awareness-raising	-0.070	-0.068	-0.074	0.287	1					
(f) Knowledge and skills	-0.084	-0.094	-0.027	0.073	-0.051	1				
(g) Accessibility to resources	-0.035	-0.124	-0.124	0.077	0.128	0.017	1			
(h) Forming organizations	-0.053	-0.026	0.060	0.013	-0.139	0.043	0.051	1		
(i) Empowerment	0.024	0.264	0.223	-0.061	0.108	-0.162	0.096	0.064	1	
(j) Participation in tourism sustainable development	0.032	0.141	0.211	-0.012	-0.045	0.001	-0.093	-0.032	-0.049	1

Source: Findings of the present study, 2019

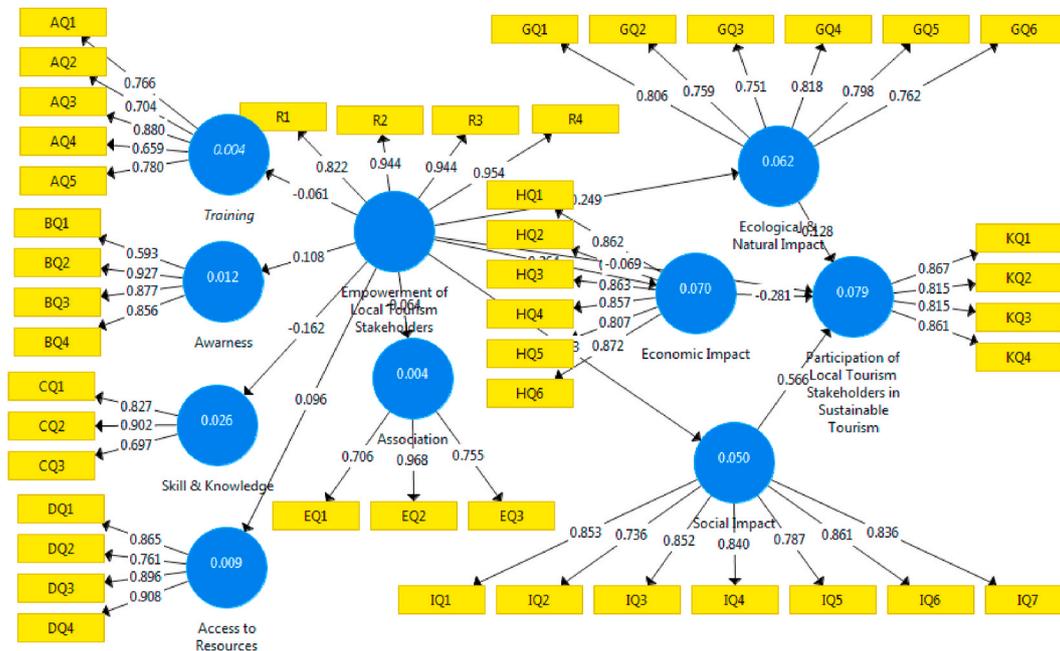


Fig. 3. Model in standard coefficients estimation, Source: Findings of the present study, 2019.

showed that the perceived economic impacts of tourism, as a mediating variable, affect the participation of local tourism stakeholders in the development of tourism. According to the findings and the coefficient of determination, the “knowledge and skills” variable has the highest impact on empowering local tourism stakeholders; accessibility to resources has the least impact on empowering local tourism stakeholders. The results also showed that the mediating role of economic impacts affected by the empowerment of local tourism stakeholders in participation in tourism development has the most impact with a coefficient of determination equal to 0.070, and socio-cultural impacts have the least impact on the participation of local tourism stakeholders with a coefficient of determination equal to 0.050.

Fig. 4 shows the exterior model in a state of significant coefficients (t-value). This model tests all measurement equations and structural equations using t-statistic. According to this model, the path coefficient at a 95% confidence level is significant because the t-statistic is greater than 1.96.

Table 8 shows the path coefficients as beta, t-statistic, significance, and results of the research hypotheses. According to the results of path coefficients and t-statistic, there is a positive and significant relationship between the empowerment of local tourism stakeholders and perceived environmental impacts including environmental-ecological, socio-cultural, and economics of tourism development.

Perceived environmental-ecological impacts of tourism development affected by empowering local tourism stakeholders with a path

coefficient and t value respectively equal to 0.249 and 4.446, socio-cultural impacts of tourism development affected by empowering local stakeholders with a path coefficient and t value respectively equal to 0.223 and 3.455, and also the path coefficients and t statistic for perceived economic impacts of tourism development affected by empowering local tourism stakeholders with a path coefficient and t value respectively equal to 0.264 and 4.296 showed a positive and significant relationship between perceived environmental impacts including natural, social and economic environment and the empowerment of local tourism stakeholders. Therefore, hypotheses one, two, and three were confirmed.

In hypotheses four, five, and six, the perceived environmental impact including natural, economic, and social effects of tourism development on the participation of local tourism stakeholders was measured. The results showing the perceived socio-cultural impacts of tourism development on the participation of local tourism stakeholders with a path coefficient and t value respectively equal to 0.556 and 3.207 indicated a positive relationship. Hence, hypothesis four was confirmed. Also, the results of the path coefficient and t statistic on the perceived economic impacts of tourism development on the participation of local tourism stakeholders respectively equal to -1.228 and 1.443 were out of the critical interval, and, thus, the fifth hypothesis was confirmed. This is while the perceived environmental-ecological impacts of tourism development on the participation of local tourism stakeholders, and the results of the path coefficient and t statistic did not show a positive

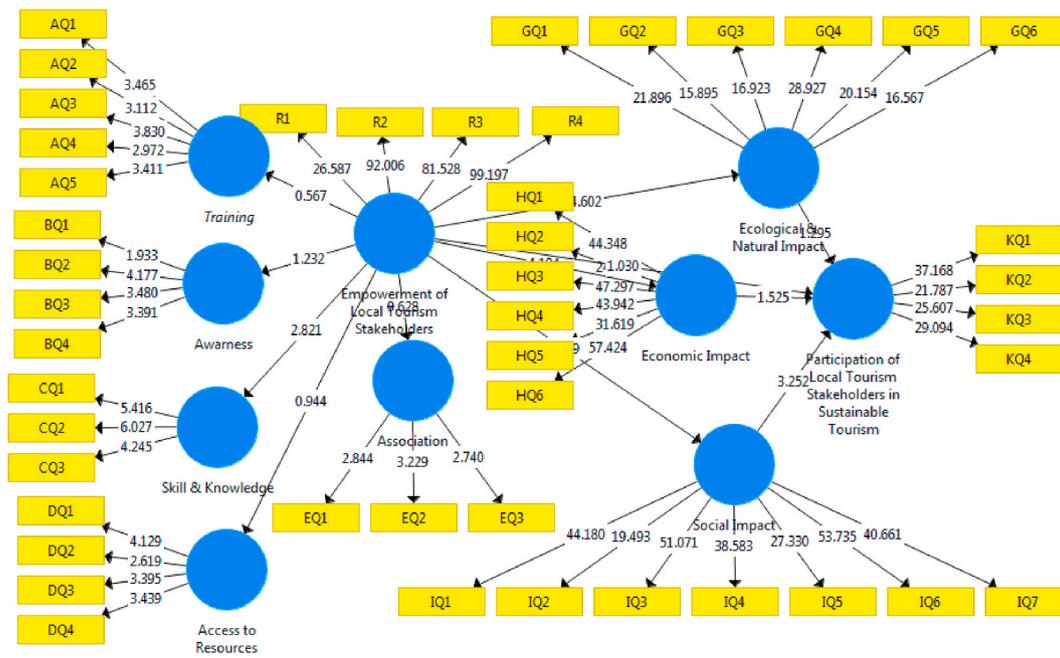


Fig. 4. Research model at significant absolute coefficients, Source: Findings of the present study, 2019.

Table 8

Path coefficients (beta), t statistic, coefficient of determination, and the result of research hypotheses.

Hypothesis	Coefficients		R ²	Result
	Beta	T		
H1: Empowerment of Local Stakeholders on Perceived environmental-ecologic impacts	0.249	4.446	0.063	Supported
H2: Empowerment of Local Stakeholders on Perceived socio-ecologic impacts	0.223	3.455	0.050	Supported
H3: Empowerment of Local Stakeholders on Perceived economic impacts	0.264	4.296	0.070	Supported
H4: Perceived environmental-ecologic impacts on Participation in tourism sustainable development	-0.128	1.279	0.079	Not Supported
H5: Perceived socio-ecologic impacts on Participation in tourism sustainable development	0.566	3.207		Supported
H6: Perceived economic impacts on Participation in tourism sustainable development	-0.281	1.443		Not Supported
H7: Empowerment on Participation in tourism sustainable development	-0.069	1.016		Not Supported

Source: Findings of the present study, 2019

relationship. Therefore, hypothesis six was not confirmed.

Hypothesis seven examined the relationship between the empowerment of local tourism stakeholders with the mediating role of perceived environmental impacts such as natural, economic, and social on the participation of local tourism stakeholders. The results of the path coefficient and *t*-test with respective values equal to -0.069 and 1.016 on the effects of empowering local tourism stakeholders on stakeholder participation in sustainable tourism development did not reveal a positive and significant relationship between empowering local tourism stakeholders and sustainable development participation. Therefore, hypothesis seven was not confirmed.

5. Discussion

Improving empowerment indicators can provide the appropriate context for participation in the sustainable tourism development process through the environmental impacts perceived by local tourism stakeholders. This study examined three hypotheses for analyzing this category. The results showed that there is a positive relationship between the empowerment of local tourism stakeholders and the perceived environmental impacts of tourism development (Table 8). These results are consistent with research studies done by (Jørgensen & Thoning, 2017) that considered the improvement of empowerment indicators effective in increasing the participation of local tourism stakeholders in improving environmental quality. The results of the present study are also in line with (Kunasekaran et al., 2017) that identified economic, traditional, and religious factors as hindering stakeholder participation in tourism. Chili and Xulu (2015) found that perceived economic impacts play an important role in the participation of local tourism stakeholders in economic activities. The results of the present study are also in line with the findings of Burgos and Mertens (2017) that considered membership in organizations to be an effective factor in local stakeholders' participation. In other words, empowering local stakeholders reinforces social relationships and prioritizes community interests, and preserves natural heritage through participation in tourism development, and thereby brings local stakeholders' satisfaction with tourism development.

The perceived environmental impacts including the natural, social, and economic factors of local tourism stakeholders (as shown in Table 8) have a significant effect on participation in sustainable tourism development. Comparing the results of the present study with the results of Butler (2017), it was found out that perceived environmental impacts do not match local tourism stakeholders' willingness to participate in a naturalized environment. The results are also in line with the findings of Strydom (2019) that considered perceived social impacts to be effective in improving interactions and social well-being and promoting traditional cultural values. Findings of Lindström and Larson (2016) that emphasized the responsibility of local tourism stakeholders to influence the economy are consistent with the findings of the present study.

Empowerment was also assessed by the mediating role of the environmental inclusive natural, social, and economic factor impacts

perceived by tourism stakeholders for their participation in the process of sustainable tourism development; however, the results were not confirmed. The findings of the present study are inconsistent with the results of the study by [Strzelecka et al. \(2017\)](#) that consider empowerment as an effective factor in involving local stakeholders in the process of participation in sustainable development. The findings are also inconsistent with research by [Knight and Cottrell \(2016\)](#) that emphasized empowering local tourism stakeholders for participation in sustainable tourism development. Because the researchers believe that empowerment consistent with the power structure, which is 'generative', employs empowerment facilitators and delegates power to local stakeholders of tourism, helps their participation in the development process of sustainable tourism. Nevertheless, in the current research, empowerment was in one way or another non-generative and did not go together with the power level of local stakeholders of tourism. As a result, it did not have so much impact on improving the participation of stakeholders in the process of sustainable tourism.

6. Conclusion and suggestions

In recent years, the relatively large expansion of short-term trips across all seasons to the rural settlements around the metropolis of Tehran and Karaj has highlighted the role of local tourism stakeholders in influencing the tourism process. Therefore, inspired by [Blau \(1964\)](#) and Rowland's power theory (1995), empowering local tourism stakeholders, if done properly (power within), could pave the grounds for their participation in tourism development. In the present study, indicators of empowering local tourism stakeholders were considered as the facilitators of their participation in the process of sustainable development participation. Therefore, empowering local stakeholders in the right direction (power within) can influence their participation in sustainable tourism development, and reduce the negative impacts of tourism development. The process of participation in sustainable tourism development can also be assisted by appropriate planning to increase the capacity of local tourism stakeholders. For example, when local tourism stakeholders are voluntarily involved in tourism development programs or control the executable parts of tourism activity, one can expect tourism development planning to be on the path of sustainable tourism development. The results of the present study revealed that due to non-generative measures of empowerment in Iran which are based on empowerment in power and authoritative conditions (contrary to the views of Blau and Rowland), there is no significant positive and meaningful relationship between the empowerment of local tourism stakeholders and participation in the sustainable tourism development process. In other words, according to Rowland's view, when empowerment is generative, participation in the sustainable development process takes place. However, in the areas under study in Iran and under the socio-economic and political conditions of Iran, empowerment has been non-generative and in an authoritative manner. As a result, the level of participation of local stakeholders in tourism development has been low.

Therefore, empowering local tourism stakeholders, if done properly (power within), can pave the grounds for their participation in tourism development as subjective. Therefore, local reinforcement is important because it can be effective in creating sustainable empowerment cycles. Here, the local empowerment process of local tourism stakeholders results in informed and active participation of local tourism stakeholders in tourism development. Like many other social processes, this process, as discussed by [Blau \(1964\)](#) and [Rowland \(1995\)](#), is a gradual process that begins with small experiences. The basis of these small experiences is to raise the awareness of local stakeholders. They also strive to share experiences and understand common needs in tourism development. It is noteworthy that due to the non-generative empowerment in Iran, it has a negatively directed impact on the empowerment of local tourism stakeholders in sustainable tourism development. That is, the extent to which the empowerment of local tourism stakeholders is affected by the

performance of private and public sectors failed to influence the participation of local tourism stakeholders; the results revealed that the perceived environmental-ecological, and economic impacts of tourism development did not have a significant effect on the participation of local stakeholders in tourism sustainable development. Therefore, a change of attitude in empowerment measures from non-generative and authoritative to generative empowerment and paying attention to local tourism stakeholders as objective humans in the empowerment process, and revising training courses to inform local tourism stakeholders of the environmental and economic impacts of tourism development, and upgrading their environmental knowledge and skills (natural and human) to optimally utilize available resources, and forming public organizations, etc. improve the perceived environmental impacts of local stakeholders and gain their trust and satisfaction in participating in tourism development and striving to preserve the environment for sustainable tourism development. Thus, the previous literature and the results of the present study showed that empowering local tourism stakeholders on the one hand necessitates the participation of local tourism sustainable development stakeholders and on the other hand sustainable tourism development necessitates the improvement of empowerment indicators. This reciprocal relationship reveals the importance and necessity of local tourism stakeholders and their increased participation and cooperation in the process of sustainable tourism development. In other words, in the planning of tourism development, the positive and convergent role of empowering local stakeholders in planning sustainable tourism and regional development should be considered.

In future studies, it is suggested to investigate the perceived environmental impacts of local tourism stakeholders on tourism development through more comprehensive approaches such as the theory of social exchange, collaboration, and social capital. Also, it is suggested to conduct studies on the empowerment of non-governmental organizations and the authorities involved in empowerment measures to improve the empowerment of local tourism stakeholders from power over to power within. In other words, studies need to investigate how local stakeholders can participate in non-governmental organizations, as well as the communication between these organizations to achieve their collective power.

One of the limitations of this study was the analysis of empowerment measures for local management (non-governmental organizations and the authorities of tourism development); that is, the involved individuals in performing the employment measures for local tourism stakeholders. However, this issue was not investigated in this study. Another limitation was investigating how the local stakeholders could join in a non-governmental organization, and the communication between these organizations to achieve their collective power. There were problems regarding access to local tourism stakeholders in the group of females, due to ethnic, cultural, and religious issues. Another problem that affected access to local tourism stakeholders was due to the seasonality of tourism in the area under study. Furthermore, the ethnic diversity of the local stakeholders was due to the proximity of the area under study to the metropolises of Tehran and Karaj and the local stakeholders were immigrant. Besides, access to the local tourism stakeholders was another problem of the study. Though these stakeholders provided services to the tourists on the tourist route and at the destination, they did not stay overnight in the area.

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