UNIVERSITY OF LJUBLJANA SCHOOL OF ECONOMICS AND BUSINESS

MASTER'S THESIS

Mahsa Sanoubar

EUROPEAN MASTER IN TOURISM MANAGEMENT

FACULTY OF HUMANITIES, UNIVERSITY OF SOUTHERN DENMARK SCHOOL OF ECONOMICS AND BUSINESS, UNIVERSITY OF LJUBLJANA FACULTY OF TOURISM, UNIVERSITY OF GIRONA

MASTER'S THESIS

The impact of vitality on attitudes towards sustainable tourism: Evidence from global travel, tourism

AUTHORSHIP STATEMENT

The undersignedMahsa Sanoubar_, a student at the University of Ljubljana, School of Economics and Business, (hereafter: SEBLU), author of this written final work of studies with the title
The impact of vitality on attitudes towards sustainable tourism: Evidence from global travel, tourism prepared under supervision of Prof. Dr. Tanja Mihalic and co-supervision of Luis Prats.
DECLARE
1.this written final work of studies to be based on the results of my own research.
2. the printed form of this written final work of studies to be identical to its electronic form.
3. the text of this written final work of studies to be language-edited and technically in adherence with the SEBLU's Technical Guidelines for Written Works, which means that I cited and / or quoted works and opinions of other authors in this written final work of studies in accordance with the SEBLU's Technical Guidelines for Written Works.
4. to be aware of the fact that plagiarism (in written or graphical form) is a criminal offence and can be prosecuted in accordance with the Criminal Code of the Republic of Slovenia.
5. to be aware of the consequences a proven plagiarism charge based on the this written final work could have for my status at the SEBLU in accordance with the relevant SEBLU Rules.
6. to have obtained all the necessary permits to use the data and works of other authors which are (in written or graphical form) referred to in this written final work of studies and to have clearly marked them.
7. to have acted in accordance with ethical principles during the preparation of this written final work of studies and to have, where necessary, obtained permission of the Ethics Committee.
8. my consent to use the electronic form of this written final work of studies for the detection of content similarity with other written works, using similarity detection software that is connected with the SEBLU Study Information System.
9. to transfer to the University of Ljubljana free of charge, non-exclusively, geographically and time-wise unlimited the right of saving this written final work of studies in the electronic form, the right of its reproduction, as well as the right of making this written final work of studies available to the public on the World Wide Web via the Repository of the University of Ljubljana.
10. my consent to publication of my personal data that are included in this written final work of studies and in this declaration, when this written final work of studies is published.

Ljubljana, __October 5th,2023___ Author's signature: Mahsa Sanoubar

Acknowledgement

I want to express my gratitude to Prof. Tanja Mihalic for her support and guidance throughout my master's thesis journey.

I am also deeply thankful to all the participants in the questionnaire.

A special thanks to my father for his invaluable support of the program, which was instrumental in the successful completion of my EMTM journey. Your assistance and encouragement were instrumental in this endeavor.

I also want to express my deep appreciation to my mother and sister, whose care and love was invaluable. Your encouragement and belief in me played a vital role in my academic success.

Table of Contents

1 Introduction	2
1.1 Rational	2
1.2 Research Question	5
1.3 Structure	5
2 Literature Review	6
2.1 Tourism	6
2.1.2 Concept of Sustainability	
2.1.3 Sustainable tourism development	
2.1.4 Youth attitude towards sustainable tourism	11
2.2 Vitality	
2.2.1 Field of vitality	
2.2.2 Vitality and Sustainable Tourism Development	
2.3 Environmental Awareness	18
2.4 Organizational Intelligence	21
2.5 Research Background	23
3 Methodology	29
3.1 Type and Research Method	29
3.2 Research Variables	29
3.3 Population	30
3.4 Sample and Sampling Method	30
3.5 Data Collection Method	31
3.6 Components of questionnaire	31
3.7 Validity	32
3.7.1 Face Validity	
3.7.2 Factor Analysis-based Validity	32
3.8 Reliability	34
3.9 Data analysis methods	35
3.9.1 Normality test of data (Kolmogorov-Smirnov test)	
3.9.2 Structural equation model (SEM)	35
4 Discussion	36
4.1 Respondents' demographic characteristics	36
4.2 Descriptive statistics of research variables	37
4.3 Inferential Analysis	39
4.3.1 Testing the normality of the variables.	39
4.3.2 Correlation test of research variables	
4.3.3 Evaluation of the research model	40

4.3.4 Evaluation of the structural model	42
4.3.5 Goodness of fit (GOF)	44
4.4 Examining research models and hypotheses	45
4.5 Findings	51
4.5.1 Descriptive Findings of the Study Population	
4.5.2 Descriptive Statistics Findings	51
4.5.3 Inferential Findings of the Research	52
4.6 Development of hypotheses	52
4.7 Recommendations for tourism planners	56
5 Conclusion	57
Reference List	59

Table of Tables	iii
Table of Figures	iii
Table of Appendices	iv
List of Abbreviations	V

Table of Tables

Table 1 Components of Sustainable Tourism Attitudes	. 32
Table 2 Kaiser-Meyer-Olkin (KMO) Statistic and Bartlett's Test Results	. 33
Table 3 Calculated Cronbach's Alpha Coefficients for Research Questionnaires	. 34
Table 4 Distribution of Respondents' Gender	. 36
Table 5 Distribution of Respondents by Age	. 36
Table 6 Distribution of Respondents' Experience	. 37
Table 7 The mean of vitality variable items	. 37
Table 8 Mean of Sustainable Tourism Attitude Items	. 37
Table 9 Average items of organizational intelligence	5
Table 10 Mean of environmental awareness variable items	. 38
Table 11 Output of the Kolmogorov Smirnov test to check the normality of research	
variables	. 39
Table 12 Pearson correlation test results	. 39
Table 13 Convergent validity check	. 42
Table 14 checking the Discriminant validity in the research model	8
Table 15 Values of the evaluation criteria in the structural model of the sub-model	. 44
Table 16 values of structural model fit criteria	. 46
Table 17 examines the direct relationships of research variables	. 47
Table 18 examining the indirect relationships of the research variables	. 47
Table 19 examining the impact of vitality on the attitude towards sustainable tourism.	. 48
Table 20 examining the impact of vitality on organizational intelligence	. 48
Table 21 examining the impact of vitality on organizational intelligence	. 49
Table 22 examining the impact of vitality on the attitude towards sustainable tourism	
with the mediating role of organizational intelligence.	. 50
Table 23 examining the impact of vitality on the attitude towards sustainable tourism	
with the moderating role of environmental awareness.	. 51
Table 24 Summary of research results	. 51
Table of Figures	
Figure 1 Factor Loadings in Standardized Estimation	
Figure 2 t-values of relationships of the main research model	. 46

Appendices

Appendix 1 Tables	2
Appendix 2 Figures	
Appendix 3 Questionnaire	
Appendix 4 KMO Outcomes	

List of abbreviations

GOF - Goodness of Fit

WTO - World Tourism Organization

UN - United Nations

SEM - Structural Equation Model

CFA - Confirmatory Factor Analysis

AVE - Average Variance Extracted

KMO - Kaiser–Meyer–Olkin test

WATA - World Association of Travel Agencies

Abstract

The subject of sustainable tourism has grown in importance in recent years, both from a theoretical and corporate strategy perspective. Among the factors that contribute to sustainable tourism is vitality. Therefore, the purpose of this study is to investigate how vitality influences senior travel agency managers' perceptions of sustainable tourism while also taking organizational intelligence and environmental awareness into account. This research is both descriptive and applied, which uses a survey as the data collection method. 384 managers of travel agencies worldwide constitute the statistical population, from which a sample was drawn at random., using the Cochran formula for an unlimited population. Data collection instruments include standard questionnaires for measuring vitality attitude towards sustainable tourism, environmental awareness, organizational intelligence. The questionnaires' validity was verified using the face method and KMO, and their reliability was assessed using the Cronbach's alpha method. Data analysis software such as SPSS and SmartPLS was utilized. The findings showed that organizational intelligence and attitudes toward sustainable tourism were significantly positively impacted by vitality. Furthermore, a direct correlation between organizational intelligence and attitudes toward sustainable tourism was discovered. Additionally, in the relationship between vitality and sustainable tourism, environmental awareness was found to be a moderator and organizational intelligence to be a mediator. These findings provide important insights for improving sustainable tourism practices.

Keywords: vitality, attitude towards sustainable tourism, environmental awareness, organizational intelligence.

1 Introduction

1.1 Rational

Mental vitality refers to an individual's positive mental energy and liveliness. A person with high levels of vitality is filled with a sense of being fully alive. Unlike specific environmental threats, mental vitality is an internal energy source that originates from within the individual. The available evidence suggests that individuals differ in terms of their life experiences, and these differences are mostly influenced by motivational factors and individual characteristics (Xu & Fox, 2014). Vitality increases attachment to the living environment and helps preserve the environment, which enhances people's empathy towards the environment. Empathy among tourists and stakeholders creates positive emotions and a strong dedication to preserving the environment, improving the quality of life for locals, and attracting more tourists (Adongo et al., 2018). Individuals who experience less conflict are less likely to suppress their vitality, and the more they experience vitality, creativity, self-actualization, and energy. When a person engages in something spontaneously, they not only do not feel tired and hopeless, but they also feel that their energy and power have increased. Overall, the internal feeling of vitality is an important indicator of mental health (Gray, 2018). It has also been shown that individuals with high vitality are better able to mobilize their resources or actively participate in health-related activities and can use more energy resources (Ryan & Frederick, 1997).

To preserve biodiversity and wildlife, conservation of nature refers to the prudent management and sustainable utilization of natural resources. Human values serve as the foundation for sustainable attitudes. Individuals who have a human-centered perspective prioritize the material and economic advantages of nature over its environmental advantages. Conservation is the primary driving force behind the biocenters' lack of emphasis on tourism-driven economic growth, not a lack of support for it. They will encourage tourism and economic expansion that have as little detrimental impact on the environment as possible. Respect for the environment and its preservation is a culture, and understanding person's own personality, interpersonal relationships, surroundings is referred to as their culture. (Momeni, 2014). Therefore, environmental protection is an essential part of a cultural policy and requires the use of the best educational methods to ensure natural resources are used in an appropriate way. Environmental education is the foundation of environmental protection, whose goal is to find the most suitable and best system and method for providing content and the manner of activities and structural implementation that forms the basis for promoting environmental awareness in society. This way, every individual in society can be responsible for protecting and supporting the environment by respecting nature. Creating a balance between the enjoyment of visitors and the conservation needs of natural attractions is also necessary. Searching for such a balance is something that should define the concept and philosophy of visiting natural and environmental attractions and ecotourism (Momeni, 2014). In this regard, knowledge and awareness play a deterrent role; that is, environmental education leads to correcting their wrong behaviors towards nature, and as a result, leads to desirable environmental behaviors.

Contemporary era is a time of increasing environmental awareness and attention to the role of a healthy environment and the growth of sustainable travel as a means of enhancing both the quantity and quality of human and natural life. There are several factors that have an impact success of programs and plans related to a healthy environment and the preservation of natural resources. One of the most important actions to address environmental problems, and to develop sustainable tourism, is to promote public culture in this area, which itself requires education on the environment (Azadkhani, 2020).

Furthermore, in recent years, sustainable tourism has gained importance in both theory and corporate strategy. (Cheng et al., 2019). Sustainable tourism can only be created by sustainable businesses and enterprises that take all different factors such as economic, social and environment into consideration (Badulescu & Badulescu, 2014). However, it is evident that our attitudes and knowledge shape an individual's behavior. As long as an individual's attitude towards a subject is not positive, there is a high likelihood that their actions will not change. Therefore, numerous studies on the variables influencing attitudes have been carried out, and various variables have been identified. One of the important explanations is the attitudes and emotions of managers and their feelings about their relationship with the surrounding environment. Perhaps vitality is another influential variable in this process, and the primary objective of the current research is to clarify it. vitality is a particular type of psychological experience in which individuals feel enthusiastic and spiritual (Ryan & Frederick, 1997).

Given that members of organizations have different values and beliefs, using organizational intelligence and utilizing smart and specialized individuals can create a more effective competition and higher efficiency, taking advantage of the full potential and talents of elite individuals. Therefore, organizational intelligence makes it more flexible and shows a more appropriate reaction to change compared to traditional circles. Additionally, exchanging ideas and expressing different perspectives can increase service to members of the organization, paying attention to their opinions, increasing productivity, and improving the morale and commitment of members, all of which are benefits and applications of organizational intelligence that can be very effective in the well-being of personnel in an organization.

Sustainable tourism development is considered a solution to overcome the threats for the nature. According to Nickerson et al. (2016), the objectives of sustainable tourism are social and cultural benefits, economic opportunity creation, and environmental

protection. Travelers, companies, and host communities are among the stakeholders who should be satisfied by sustainable tourism. According to Pulido-Fernandez et al. (2015) and Sharpley et al. (2015), sustainable tourism must provide visitors with a fulfilling experience, optimize profits for business owners, foster development for hosts, and safeguard the environment. However, there are numerous challenges to overcome in putting sustainable tourism into practice, including inconsistent and unreliable support from stakeholders (Das & Chatterjee, 2015).

Although governmental and non-governmental organizations, as well as tourism businesses, have worked hard to achieve sustainable tourism, visitor support has not yet reached its full potential. According to research by Santana-Jimenez and Hernandez (2011), tourists usually do not think twice about participating in local community development and environmental preservation when it comes to leisure activities. Furthermore, travelers damage coral reefs, bring in invasive species into unfamiliar ecosystems, and gather and carry resources for mementos (Jägerbrand & Alatalo, 2015). Therefore, it is crucial to come up with plans to guarantee that visitors behave sustainably.

Sustainable tourism literature suggests that accepting responsibility for sustainability depends on individuals' empathy and attachment to sustainable ideals and values (Font et al., 2016). Font et al. (2016) defines sustainable empathy as "the ability of individuals to establish emotional connections with people and the surrounding environment." In this context, empathy conceptualization is defined as the mental structures of tourists and stakeholders regarding self-care and care for others. When tourists and residents have low mental well-being, they become irritable and tired, and they may not use all their energy for daily activities. However, when mental well-being is high, there is enough energy to perform activities and the mood is favorable, and tasks are performed well (Font et al., 2016). Therefore, vital individuals have a greater attachment to their environment, love it, and make more efforts to maintain it because they consider themselves an essential part of the environment and see preserving the environment as a factor for their survival. Hence, vitality may be crucial from the view of sustainable tourism (Adongo et al., 2018).

Intelligence refers to a type of mental ability and encompasses various abilities such as reasoning, planning, problem-solving, abstract thinking, language use, and learning. Organizational intelligence, on the other hand, means acquiring comprehensive knowledge and information, which entails having a comprehensive understanding of all factors that affect an organization. By all factors, it means information about customers, superiors, competitors, economic and cultural environments, organizational processes (financial, administrative, security, production, etc.), which significantly affect how well managerial decisions are made within the company (Tarlani & Gharineh, 2010).

None of the studies have investigated the effect of vitality on attitudes towards sustainable tourism, and no research has considered organizational intelligence as a mediator variable and the link between these two variables is moderated by environmental awareness. This study seeks to close the gap in the body of knowledge, which may involve original research in the field. The findings of this study have applications in the recruitment of senior tourism managers, the creation of educational curricula and training initiatives, the administration of human resources in a variety of contexts, and the organization and execution of sustainable tourism initiatives.

1.2 Research Question

The main research question is as followed:

What is the impact of vitality on the attitude towards sustainable tourism?

This research has a main objective and sub-objectives, the main objective is to determine the impact of vitality on attitudes towards sustainable tourism. The sub-objectives are:

- To determine the impact of vitality on attitudes towards sustainable tourism among senior managers of tourism agencies.
- To determine the impact of vitality on organizational intelligence among senior managers of tourism agencies.
- To determine the impact of organizational intelligence on attitudes towards sustainable tourism among senior managers of tourism agencies.
- To determine the impact of vitality on attitudes towards sustainable tourism, with the mediating role of organizational intelligence among senior managers of tourism agencies.
- To determine the impact of vitality on attitudes towards sustainable tourism, with the moderating role of environmental awareness among senior managers of tourism agencies.

1.3 Structure

The research is structured in 5 chapters:

• Chapter 1: As mentioned before, the aim of the research was to determine the impact of vitality on the perception of sustainable tourism in senior managers of travel agencies, and therefore, the topic of the research was explained and the importance of it was justified.

- Chapter 2: This chapter provides an overview of literature review, that outlines the existing academic ideas related to the topic of this research, followed by a brief background of previous research conducted on the topic at the international levels.
- Chapter 3: This chapter outlines the methodology used in the study. The statistical population, data processing technique, model utilized, operational definition of variables, and data analysis method will all be covered.
- Chapter 4: The analysis of the data and findings is the focus of this chapter. Descriptive and inferential statistics are divided into two sections, one for each. First, the dispersion statistics of the data collected will be briefly examined. Next, different regression analysis models will be provided, and the outcomes of statistical tests will be discussed.
- Chapter 5: This chapter provides a summary of the research findings, followed by recommendations for the further research as well as limitations of this study.

2 Literature Review

2.1 Tourism

Tourism is a cultural-historical heritage and a cultural-economic approach that, in addition to creating a new economic activity, can lead to the sustainability of national identity, national security, and political-cultural stability by achieving cultural-historical heritage synergy. In the modern era, tourism is one of the most significant human endeavors that alters the landscape, human lifestyles, and political, cultural, and economic spheres (Zargarankhoozani et al., 2021). Additionally, it is among the most crucial elements in fostering natural and cultural exchange as well as familiarity on a variety of levels with other countries (Zarabadipour & Abdollah, 2013). As a collection of economic activities, tourism development plays a major role in fortifying the economic underpinnings of societies. Tourism also creates new jobs, generates income, raises taxes, creates currency, and strengthens social infrastructure—all of which contribute to the expansion and advancement of other industries. Consequently, tourism is one of the components of trade and is called invisible exports (Lynch, 2018), but this component is different from other goods and services in international trade; because the tourist must consume the goods in the exporting country (Zarabadipour & Abdollah, 2013).

2.1.2 Concept of Sustainability

The World Commission on Environment and Development defines sustainability as "development that meets present needs without compromising the ability of future generations to meet their own needs." Given that tourism is an industry that relies heavily on the environment as its main attraction, and on the other hand, it also benefits significantly from the long-term efficiency of this environment, the relationship between sustainable development and tourism is clear, and contribution of tourism to sustainable tourism is crucial. The idea of sustainability highlights the fact that humankind has certain basic needs, like clothing, food, and housing, which the process of development should attend to while also balancing these needs with desirable goals and aspirations, like improving living standards, ensuring security, and having access to travel. But in the end, the amount of possible development is determined by environmental limitations. Sustainable development has always been associated with economic growth, but this also implies that development is limited by technological constraints and land capacities. Currently, sustainable development also emphasizes the need for social and ecological balance. On the other hand, this is essential for managing and protecting natural resources and ecosystems as the basic conditions for human life (Jafari, 2018).

2.1.3 Sustainable tourism development

The development of sustainable tourism has become a critical component in providing locations with an advantage. Economic, social, environmental, and cultural factors are part of multifaceted structure of tourism development. Previous research shows that all the nations should balance economic, environmental, and social factors (Lee & Chang, 2019). This is consistent with Butler's (1999) theory, which breaks down sustainable development into three main categories: social, environmental, and economic. Culture is also an important factor. Ensuring diversity, differences, independence, and learning of people and cultures that are crucial in cultural transfer is the aim of the cultural and social component (Wang & Zhang, 2020). Some researchers believe that sustainability has three dimensions: social, environmental, and economic. These dimensions are distinguished by social equality, ecological sensitivity, and economic sustainability (Butler et al., 1999).

Prioritizing sustainable development in the global development paradigm was first done by the Brundtland report. The following criteria are listed in this report for long-term perspectives and sustainable development: preserving biodiversity and unity; providing for basic human needs; promoting justice and equality; bringing choices for both the current and next generation; and boosting autonomy. Justice between human environments—that is, social environments—and other environments is demanded in this report. Scientists and decision-makers quickly became interested in and supportive of this concept. The United Nations' sustainable development paradigm considers the ecological, or quality of life, economic, and welfare aspects of sustainability. This focuses specifically on the planet's future in terms of opportunities for environmental welfare and sustainable economic growth for the planet and human. (Mihalic et al., 2021).

According to UNWTO websites in October 2020, sustainable tourism is defined as "tourism that fully takes into account its current and future economic, social, and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities." According to this definition, the values of sustainability ignore ideological and value-based imbalances in favor of striking a balance between ecological and economic factors. It is also considered possible that the interests of local communities, tourists, businesses, and the environment could be coordinated. Furthermore, stated in this definition is the requirement that "the development of sustainable tourism also requires conscious participation of all relevant stakeholders, strong political leadership, and the creation of consensus, and it must maintain a high level of tourist satisfaction" (Mihalic et al., 2021).

As per the 2017 report by the World Tourism Organization (WTO), the tourism sector is experiencing rapid growth and contributes over 10% of the global gross domestic product (GDP). From 25 million in 1950 to 166 million in 1970 to 1.442 billion in 2018, the number of foreign visitors grew. It is expected to increase to 1.8 billion by 2030. These numbers can cause several problems to the environment. Furthermore, unplanned, overcrowded, and uncontrolled tourism populations have significant adverse effects on environmental quality. This leads to excessive consumption of natural resources, a decline in the quality of services, and an increase in progressive waste and pollution. Moreover, over tourism results in issues such as soil erosion, natural resource depletion, waste accumulation, air pollution, and endangerment of biodiversity, and degradation of cultural-social habitats (Shaheen et al., 2019).

There has been increase in both the number of tourists across the globe and environment pollution. According to Azam et al. (2018), countries that receive large numbers of tourists are also experiencing economic tourism, despite being known as the "paradise of air pollution, climate change, and global warming." In Singapore, a popular tourist destination, is struggling with environmental problems and asking for more sustainability in environment (Zhang et al., 2020). According to earlier research, growth in the tourism industry brought about by foreign travel increased visitor numbers, energy use, carbon dioxide emissions, and air pollution—all of which contributed to climate change (Aslan et al., 2021). The expansion of tourism transfers very harmful environmental costs alongside social and economic benefits to host communities (Simo-Kengne, 2022).

Historic sites require more sustainable development because they are part of our living natural and cultural heritage. According to Rostayi-Manesh et al. (2017), there is a possibility that the growth of tourism could lead to unfavorable consequences like the decline of customary practices in the area and an increase in traffic and congestion. According to Baloch et al. (2022), a win-win approach to safeguarding ancient heritage

and ensuring sustainable tourism development can only be pursued by coordinating tourism development with economic, environmental, and socio-cultural resources.

According to research, locals are more likely to support tourism development if they think it will benefit them. On the other hand, they would be against tourism development if they think it will hurt them. Research by Guo et al., (2020) and Rasoolimanesh et al. (2017) has demonstrated that while negative perceptions of tourism weaken support for its development, positive perceptions of tourism enhance it. According to Almeida-Garcia et al., (2016), tourism has a mixed effect on the environment, a negative social impact, and a positive economic impact. As a result, a variety of factors affect how locals view and feel about the growth of tourism. However, locals are open to tourism and think it can contribute to the growth of the local economy. However, locals may be against tourism's growth if it causes problems like traffic, pollution, environmental harm, and an increase in crime (Higham, 1999). It is necessary to take into account the attitudes and perceptions of the locals regarding tourism in order to create an environment that is both appealing and supportive of sustainable tourism (Guo al., 2020).

People are eager to explore nature, adventure, wonders, communities, and cultures through tourism. They are also encouraged to meet new people, engage with values, and take part in customs and novel events. The goal of tourism development is to draw travelers to a particular location to support and sustain the tourism sector. Furthermore, environmental sustainability refers to the deliberate endeavor to conserve natural resources and social-cultural heritage to safeguard environmental ecosystems while promoting human health and economic prosperity. Clean and green natural landscaping, rich biodiversity, immaculate coastlines, expansive desert steppes, social-cultural values, and archaeological heritage are examples of how environmental sustainability is reflected. These elements also show how motivated tourists are to visit a place and how eager the locals are to welcome them. Growth in tourism and environmental sustainability are thus seen as interdependent systems. Thus, the quality of sustainable and green tourism is impacted by both the direct influx of tourists and the growth in tourism development (Azam et al., 2018; Hasan et al., 2020).

Since the UN (United Nations) report in 1987 introduced the concept of sustainable tourism, governments, businesses, and consumers have officially recognized tourism as an activity. When sustainability first introduced in the tourism industry, it was thought that environmental protection and preservation were essential. But over time, it developed into a more all-encompassing strategy where sustainable development is viewed as striking a balance between the environmental, social, and economic spheres. Fallon and Kriwoken (2003) state that every one of these aspects considers the requirements of the environment, community, industry, and tourists.

The multiplicity of definitions for sustainability speaks to the intricacy of the idea, the diversity of its components, and the broad application of its tenets. Businesses and academic institutions constantly critique the idea of sustainable development. Some have argued that the definition of sustainability is ambiguous due to the difficulty of reconciling and achieving sustainable development, which implies stability, in real-world settings (Liu, 2003). Unplanned tourism growth can result in overcrowding, social tension between the host community and visitors, crime, pollution, landscape destruction, profit leakage to locations outside the host country, price increases, unfavorable working conditions, and negative social, economic, and environmental effects (Cabezas, 2008). It can also lead to the commercialization of culture and traditions or overcrowding (Yang et al., 2015).

Nonetheless, agencies like the UN promote tourism and contend that it can be an instrument for sustainable development. To demonstrate how tourism can support economic sustainability, local development, gender equality, high-quality employment, and environmental conservation, international organizations have established twelve sustainable tourism objectives.

Tourism is a rapidly growing and expanding industry. Therefore, to understand all dimensions and aspects of it, there is a need for basic and deep theoretical discussions, comprehensive and complete about this emerging phenomenon. To attract, transport, host, and control tourists and other visitors, a variety of actors, including capital, governments, universities, non-governmental organizations, and host communities, must cooperate. Together, these actors create the phenomena and interactions that make up tourism (Azam et al., 2018). This trend provides cultural and environmental interaction opportunities between the host and the tourist and the tourist destination. Therefore, for all countries, especially those who are willing to gain income from this industry and are also concerned about their cultural, environmental, and health values, understanding the concepts of tourism and redefining it, and directing supply and demand to organize the tourism market flow is a top priority (Azam et al., 2018).

Although tourism can potentially be a new financial resource, improve the economic situation of local people in rural communities, reduce poverty and be a tool for developing rural areas, when a community turns to a travel destination, the quality of life, value systems, and traditions of the community are also affected (Gnoth & Zins, 2013). That is why in developed countries, this issue is related to agricultural policies and is often promoted as a strategic approach to preserving the environment and traditional rural culture (Lee & Chang, 2008). In this regard, assessing the capacity of local communities for successful tourism development, including management issues and requirements for tourism development planning, especially in rural communities, is necessary.

The goal of tourism resource development and tourism area development is to increase the standard of living and overall welfare of the inhabitants of tourist communities (Boukas & Ziakas, 2016). In tourist communities, for instance, local residents and their cultural spaces, festivals, rituals, and habits are attractions in and of themselves, representing the history and cultural legacy of the place. Therefore, an important element of community resources and tourism development is motivating locals to maintain their true cultural traditions. However, it is impossible to divorce the growth of tourism from locals' perceptions of visitors, since happy hosts encourage greater rates of return business (Ukaegbu & Carr, 2020). To this end, examining local's perceptions and attitudes is vital for sustainability.

In the earlier growth of tourism, people want to profit from travel, and financial success may play a significant role in boosting support for travel. On the other hand, people who do not believe in gaining from travel might be less supportive of its growth (Ukaegbu & Carr, 2020). The attitudes of locals toward tourism are influenced by sociocultural as well as economic factors. Researchers are discovering that people's support for tourism is influenced by their involvement in the environment (Teye et al., 2002). People who live nearby the tourist attractions have different attitudes and perceptions. Locals play a crucial role as stakeholders in the development of tourism destinations, and the survival of local tourism depends on their cooperation and participation. There is a positive correlation between locals' attitudes, perceptions, and support for the growth of sustainable tourism. (Moghavyemi et al., 2017).

2.1.4 Youth attitude towards sustainable tourism

Many studies that have examined young people's attitudes toward the environment have revealed that the younger people are interested in ecology and protecting the environment (Vikan et al., 2007; Wesley et al., 1999). According to Han et al.'s (2018) study on young travelers' waste reduction practices, their perception of their destination's greenness and awareness of environmental degradation issues motivate them to think about the harmful effects of pollution.

There has been research on youth attitudes, behaviors, and motivations in the tourism industry. To promote sustainable tourism development, Nok et al. (2017), who investigated the reasons behind and inclinations of backpackers in Hong Kong, discovered that these travelers avoid foreign brands and are more interested in regional cuisine and customs in authentic way. In addition, backpackers value engaging with host communities, local customs and cultures, and food and services (Ooi & Laing, 2010). They pay a high attention to environmental protection. Moreover, Buffa (2015) discovered that there are significant gender differences for sustainable goods and services, with young women seeking self-improvement through engagement with local communities and holding stronger sustainability values than men (Cavagnaro & Staffieri, 2015).

2.2 Vitality

Vitality means having enthusiasm and excitement for life and all activities and tasks that a person does. Vitality is based on individuality, striving, and enthusiasm. Its prerequisite is to distinguish life into various fields and choose a domain in which one can act with enthusiasm, effort, and alertness. Vitality is not a function of a person's personality and identity but a function of the situational context (Gray, 2018). A happy person is someone whose happiness is not only manifested in personal activities and productivity but also radiates to those who are in contact with this person and energizes others as well. The important thing to remember is that vitality is more than just excitement and that vitality is a mixture of positive energy. Vitality in one's career path is a function of our personal orientation, which is affected by organizational conditions and environmental factors and indicates ways in which an organization can cultivate enthusiasm and interest in its employees (Maloney et al., 2019).

Vitality is one of the components of mental well-being in many research systems. The importance of attention to this issue is to the extent that national indicators of mental well-being are now being prepared, and this issue is so important that every country has developed a national indicator of mental well-being for its society. The phenomenon of vitality is a conscious experience of having energy and a good life. In fact, vitality reflects psychological and physical health. The feeling of vitality is a particular psychological experience in which individuals feel enthusiasm and spirit within themselves (Ryan & Frederick, 1997).

Vitality is not an alien phenomenon to modern society; rather, modern life is founded on human vitality. The economy of the modern world is based on its own creativity, innovation, and disciplined work, and its politics are based on the cheerful participation of citizens in areas such as civil institutions and periodic elections. Its culture is based on the innovation and creativity of artists and cultural producers on the one hand, and an open and enthusiastic approach to organizing the masses of audiences on the other. This point has been raised not only by defenders of modernity but also by its critics (Zohor & Fekri, 2003).

Vitality is one of the components of mental well-being that is widely discussed in many research systems. When an individual does something spontaneously, not only does he not feel tired and hopeless, but he feels that his energy and strength have increased. Generally, the internal feeling of vitality is a significant indicator of mental health (Arabzadeh, 2017).

Bostick and Ptacek (2001) introduced vitality as inner experiences full of energy. He sees vitality as energy derived from oneself. This energy comes from internal sources, not

from threatening individuals in the environment (Bostick & Ptacek, 2001). In other words, vitality is the feeling of being lively that is not stimulated or coerced. The concept or goal of vitality is the same as being pleasant. Vitality is a desirable emotion that is still unclear whether an individual's motivational orientation is involved in it (Argyle et al., 1989).

The feeling of vitality is closely related to happiness and is considered one of the important human experiences. Vitality is an optional feeling of being cheerful without stimulation or coercion, and the concept and goal of happiness is the same pleasantness (Bostick et al., 2000). Vitality is the scientific name for individuals' evaluation of their lives. Individuals' evaluation of their whole life or specific domains of life (such as marriage or work).

Researchers have introduced vitality as an internal experience full of energy. Vitality also indicates positive mental energy, and a cheerful person is sober, happy, and full of energy (Saricam, 2015). Ryan and Deci (2014) define mental vitality as having physical and mental energy based on the assumptions of self-determination theory and organismic structural psychology concepts. People with mental vitality experience a sense of enthusiasm, vitality, and energy (Deci & Ryan, 2014). Bostick (2002) describes vitality as an internal experience of energy that arises from oneself, the individual, or their environment and is not limited by mental interference.

Vitality is a word that has different meanings, such as immediate pleasure, long-term pleasure, and enjoyment of life (Zohor & Fekri, 2003). There are 3 main parts of Vitality, that is, happiness with life, the absence of negative emotions, and pleasant feelings. Vitality is the most important human issue for all generations and the central driving force behind human goals. According to Cohen and Herbert (1996), vitality promotes positive attitudes toward life and oneself, mental health, and emotional balance, hope for the future, positive and fulfilling attitudes toward oneself and others, positive social relationships, and personal growth and development.

2.2.1 Field of vitality

Vitality is present in all areas of life. Whether it be work, home, personal relationships, social connections, or recreation, actions can be filled with vitality or carried out with apathy and fatigue. Just as with happiness, intentional actions, whether they be instrumentally driven, value-based, or emotionally driven, can be full of vitality or lackluster. One can approach work with enthusiasm and a sense of openness to the process of its development, or with disinterest and a sense of obligation to just get it done. The same can be said of friendships and family relationships, although there may be greater expectations for vitality in these domains. Modern friendships and family relationships are based heavily on intimacy and love. These relationships are now more commonly

founded on the desires and interests of those involved, and they persist through time. However, each of the experiences tells individuals that even within the realm of friendships and family relationships, one can act with apathy and fatigue and view the relationship solely as a means to satisfy material and psychological needs. This is also true of recreation. Recreation is essentially a domain and a means for experiencing energy and excitement. People engage in recreation to obtain energy for sustaining their daily lives, for working, and for solving everyday problems. However, even in this domain, one can participate without feeling vitality or excitement. Today, recreation has become more industrialized, offering a specific experience to people. Many also view recreation as a source and domain of peace and rest. Overall, there is a serious risk of falling into traditional patterns and carrying out actions with apathy and coercion in all major domains of life, from work to recreation. It is possible that the entirety of one's life, from work to recreation, may become a domain of action carried out with apathy and obligation (Ryan & Deci, 2014).

2.2.1.1 Urban Vitality

Overall, the vitality of a community can be influenced by its economic, social, environmental, and cultural vitality. It is evident that achieving each of these factors is necessary to attain sustainable vitality in society. Since the focus of this research is on the criteria for achieving sustainable vitality in urban public spaces in accordance with sustainable urban development goals, the vitality of urban open spaces was investigated (Kohn & Herbert, 1995).

2.2.1.2 Environmental Vitality

Environmental vitality considers two distinct perspectives. Ecological sustainability relates to adaptability and diversity, including noise pollution, air pollution, unnecessary energy consumption and waste, traffic congestion, and green spaces. Secondly, it includes the issue of design perspectives, which consist of changes and instabilities such as legibility, a sense of place, architectural distinctions, conditions and regulations in various spots of the city, the quality of street lighting, and what gives a space vitality is the people who inhabit it and their active, enthusiastic, and energetic presence. The more vibrant and energetic a space is, the more it fosters human connection within the city (Kohn & Herbert, 1995).

2.2.1.3 Mental vitality

Mental vitality has been discussed in the context of self-determination theory as a virtue-based form of well-being or as considering well-being as something beyond the satisfaction of needs (Ryan & Deci, 2014). Mental vitality is defined as having physical and mental energy and is a particular psychological experience in which an individual

feels a surge of energy that they recognize as emanating from within themselves and their internal resources rather than from the environment and external resources. In other words, mental vitality is the experience of feeling energy and vitality that is not externally stimulated but is completely internal, and during this experience, individuals feel a sense of enthusiasm, aliveness, and inner energy (Ryan & Frederick, 1997).

Ryan and Frederick (1997) consider mental vitality as being in a state of vigor, enthusiasm, and well-being, not being tired, worn out, or depleted, and having clarity of thinking. They have shown that when mental vitality is low, irritability and fatigue appear, and individuals do not use all their abilities to carry out life tasks. On the other hand, when mental vitality is high, there is enough energy available to perform activities, and individuals are in a suitable state to create and carry out tasks effectively (Ryan & Frederick, 1997).

Therefore, mental vitality reflects the presence of positive psychological energy, and a person who has vitality is full of life. They actually interpret vitality as an energy that originates from within, not specific environmental threats. In their view, mental vitality is different from states of depression because vitality is an experience of feeling lively and energetic, not being forced and directed. Therefore, vitality is a manifestation of mental health and well-being, while depression is associated with mental agitation and disturbance (Arabzadeh, 1396).

Ryan and Frederick (1997) defined vitality as a different concept from happiness, since vitality is more than just arousal, being active, or having caloric reserves in individuals. Based on this, experiencing vitality is a special psychological experience in which individuals feel a sense of excitement and spirit within themselves.

Ryan and Frederick (1997) developed a scale of mental vitality as part of their self-determination theory and in line with psychological well-being. They considered mental vitality as a continuous characteristic of individuals, which has a negative correlation with anxiety and depression and a positive correlation with self-worth and confidence, using phrases such as "I often feel alert and vital." They called this form "individual differences in mental vitality" (Ryan & Deci, 2014).

One of these components is mental vitality. Mental vitality is an inner experience full of energy, and it requires mental and physical energy to experience a sense of enthusiasm and vitality. Mental vitality speaks of having a positive state and arises from emotions such as freedom, independence, and intrinsic motivation (Nix et al., 1999).

Argyle (2001) also believes that vitality has two emotional and cognitive dimensions. The emotional dimension refers to having feelings of vitality, enthusiasm, pleasure, and other positive emotions, while the cognitive dimension refers to the positive evaluation of

various components of individual and social life. Bujarski (2011), however, argues that vitality is awareness that you are the architect of the positive things that occur in your life rather than merely being aware that positive things happen to you.

The subject that has importance and its role in improving personal and social life of humans has been forgotten. Today, humans are looking for adaptation and well-being, and perhaps finding meaning in life is lost in their world. Certainly, the consequence of living with meaning is the feeling of mastery, tranquility, vitality, and happiness. A happy person feels alive and has an overall energy for living (Ryan & Deci, 2001).

Vitality is an optimistic and dynamic concept. Vitality implies a state in which the individual experiences himself as the principal, source, and origin of action. Higher levels of vitality are associated with experiences such as independence and integrity, self-realization, and variables that are associated with the perception of oneself as a person with "full functioning." Therefore, this concept is closely related to having a meaningful and purposeful life (Rogers, 1980).

Friedman (1978) found that if individuals feel that their lives are meaningful and purposeful and have confidence in the values that give direction to their lives, they will be happier. According to Argyle (2001), scores on the meaning and purpose of life scale are strongly associated with scores on happiness. On the other hand, studies related to vitality show that the thoughts and behaviors of happy individuals are adaptive and helpful. These individuals look at things with a clear perspective, pray and meditate, and make direct efforts to solve their problems and seek timely help from others when needed. Therefore, vitality can be considered an important factor in achieving a fulfilling and satisfying life.

2.2.2 Vitality and Sustainable Tourism Development

The International Union for Conservation of Nature defines ecotourism as "responsible travel to natural areas in order to enjoy and appreciate nature (and accompanying cultural features, both past and present) that has low negative visitor impact, promotes conservation, and allows for beneficially active socio-economic involvement of local populations." This idea is also described as "responsible travel to natural areas that conserves the environment and improves the well-being of local people" by the International Ecotourism Society.

The first thing that can be inferred from these two definitions is the level of tourist awareness. Tourists must be concerned about the negative effect of their actions on the environment by considering reasonable limitations for their travel, minimize these impacts. They should not only avoid harming the destination but also support indigenous

communities. This concept does not mean that the individual experience of tourism becomes less attractive, but it enables a more authentic and different experience.

With the increase in quality of life worldwide, tourism is also developing day by day. The demand for more infrastructure to be built is primarily driven by tourism. Local communities are unable to respond to this high volume of demand, and as a result, industrial activities enter the field and cause damages such as ocean and sea pollution, waste production, and deforestation. These damages are much greater in vulnerable areas. Local communities suffer from the influx of tourists because the influx of capital usually does not go into the pockets of local communities. Today's world needs sustainable tourism. Sustainable tourism teaches travelers to be more careful about natural areas and to interact with local people in a positive way, which helps to conserve natural areas, support local economies, and improve the well-being of communities.

Having more vitality leads to a person an increased sense of inclusion to their living environment and tourism, and as a result making more effort to preserve the environment. The Houston region council views vitality as originating from the power to create spaces with pedestrian-oriented different uses that can provide different aspects of the transportation system to improve economic progress and optimize the environmental system. For example, in the city of Chicago, the city's planning agency considers a happy and lively community to be active, safe, and with high-density pedestrian crossings that provide different transportation systems for timely access to work centers, shopping centers, educational centers, health centers, service and recreational-welfare centers, and basic needs (Adongo et al., 2018).

To determine the vitality of different neighborhoods in the city, both physical and mental dimensions of life, as well as various business dimensions, residential location, quality of life, and cultural and social factors have been examined. The book "Vitality House" suggests that vitality, like a coin, has two sides - one side is providing for basic life needs, while the other is in the realm of environmental sustainability. On the other hand, livelihood must be sustainable, as if production resources, employment, income, and housing are provided, but the environmental space is deficient or destroyed, in fact, the problem of livelihood will not be solved. Khorasani (2012) considers vitality to be dependent on three areas: society and culture, economy, and the environment, which provide for the economy, business, and income and are essential for the health of various segments of the population, and in the same way, to achieve higher needs such as education, health and public health, recreation, and public welfare, the environment and the use of existing resources must be such that it instills public trust and confidence in the availability of suitable reserves for future and present generations. However, the dependence of justice on vitality and social sustainability is undeniable. This justice refers to the fair distribution of physical and cultural resources and environmental and financial resources of governmental systems among citizens (Khorasani, 2012).

The concept of vitality is gained through physical vitality, ecological sustainability, solving social problems (such as weakness, uneven racial relations, etc.), economic (inappropriate jobs, swearing, etc.), environmental (reducing noise and environmental pollution, etc.), and cultural (violence, etc.) vitality (Progardo Madrid, 2007).

Higher levels of happiness and satisfaction are associated with a stronger sense of environmental belonging in societies where human needs are more fully satisfied. Vitality has a special focus on people and places, but mainly examines the space and environment. No concept alone can address different dimensions of sustainability. People and places are the two sides of vitality, according to the aforementioned statement, and a place with vitality typically has more satisfied residents who feel a sense of belonging to the surroundings. (Larice, 2005).

2.3 Environmental Awareness

Awareness of the environmental situation and examining its changes is one of the topics that has been of interest to everyone in recent years. Understanding the environmental situation plays a very important role in determining the necessary changes in the management and presentation of management plans. Acquiring environmental awareness is the first step towards sustainability and essentially the condition for the survival of humanity. Environmental awareness is the ability to understand environmental principles and live based on them (Frittief, 2015). One of the fundamental assumptions in environmental studies is that many environmental problems can be addressed by increasing public awareness of the environment. Underestimation and public awareness move positive sustainable changes in the environment. It is believed that environmental issues can be solved by environmental awareness (Salehi & Amamgholi, 2012).

Past research shows that active participation can promote environmental knowledge and literacy and cultivate the seed of environmental responsibility behavior in all social strata (Momeni, 2014). Mei et al. (2016) stated that how conscious people are of the environment today and behavior among the Malaysian people has been assessed based on 4 classifications: water pollution, air pollution, waste management, and climate change. Deniz (2016) stated that obstacles and principles of sustainable design education and training for developing countries to create sustainable environments, buildings, and products in design workshops should be considered by coaches and professional designers. Molina et al (2013) showed that gender, motivations, and attitudes have an impact on the environmental behavior of students.

Shams and Hooshmandan Moghaddam Fard (2015) demonstrated that most teachers have a positive attitude towards incorporating agricultural and environmental issues into educational programs, and teachers with prior experience in agriculture have a more

positive attitude compared to those without experience. Teaching experience in rural areas had a significant and positive correlation with environmental attitudes, while age, overall teaching experience, and education level and the discussed attitudes were not significantly correlated.

The emergence of environmental awareness dates back to the late 1960s in Western countries. Initially, this awareness was exclusive to Western countries. When the Cold War ended and environmental problems became a new global threat to human life, environmental awareness grew worldwide in the 1980s (Darsner, 2005). Raising public awareness of environmental issues can help solve a lot of environmental problems, which is one of the major progresses in environmental studies. In other words, a lot of environmental issues can to be solved by raising environmental awareness. Therefore, awareness is a process that organizes, interprets, and communicates information through the senses (Salehi, 2010). Researchers believe that increasing public environmental awareness can reduce environmental issues and problems and lead to responsible behavior towards the environment.

The first step towards sustainability is to gain more environmental knowledge. In fact, environmental awareness—the capacity to comprehend and live by the principles of environmental awareness—is essential for humanity's survival. As Kaiser et al. (1999) have stated, individuals who possess better knowledge about the environment also exhibit a higher sensitivity towards their surrounding environment. Therefore, it is highly likely that these individuals have a more positive attitude towards the environment, and their behaviors will be directed towards its preservation (Shams & Hooshmandan Moghaddam Fard, 2015). One important variable for predicting human behavior is an individual's awareness of environmental issues. Although awareness alone does not have a direct impact on behavior, it enhances other mechanisms that facilitate behavior change (Mohammadian & Bakhshandeh, 2014). In addition to awareness, the attitude of individuals towards the environment and its significance has long been a focus of researchers in predicting environmental behaviors. In the environmental sociology literature, various factors such as responsiveness, environmental awareness and concern, individual responsibility, personal and social norms, mental norms, perceived behavioral control, attitudes, behavioral intentions, awareness, environmental values, and more have been identified as social components influencing environmental behaviors. Based on this, environmental education is now recognized as a key solution to environmental issues and is being promoted among different segments of society. The goal of environmental education is to instill in individuals a sensitivity to environmental events and changes, whether they are physical, biological, social, political, or even health related. It aims to empower individuals to identify and describe environmental issues and develop innovative methods and solutions to address them. Consequently, the level of awareness, attitudes, and environmental behaviors within a society are considered indicators of national civic engagement, reflecting various aspects of the environmental situations such as personal considerations and behaviors, public capabilities, and attitudes towards sustainable communities (Aminrad et al., 2010). In recent years, the concept of environmental education and its relationship with attitudes and behaviors towards the environment has received significant attention from researchers in various fields. The result of these studies has been the development of multiple theories in this area, each of which considers social-economic behaviors as a threat to the environment (Salehi et al., 2016).

Environmental awareness is a movement that educates individuals about the need to respect and protect their natural environment. Human waste accumulates in the environment and affects the soil, wildlife, and water. With the industrial revolution, scientific advancements have led to the production of greenhouse gases that warm the atmosphere and cause gradual temperature increases, known as the greenhouse effect. Expanding environmental awareness can help preserve our natural resources and mitigate land destruction. As the environment suffers and greenhouse gases accumulate, the rising temperatures on Earth can result in gradual changes such as:

- Melting of ice caps due to temperature increases
- Droughts with water scarcity and increased forest fires
- Rising sea levels and flooding
- Destruction of coral reefs
- Increase in allergies and asthma caused by air pollutants (Aminrad et al., 2010).

Learning ways to protect the environment preserves our natural resources and guarantees a sustainable world for future generations. Environmental knowledge should be disseminated in a way that constantly raises public concerns about environmental issues. The purpose of gaining knowledge about environment is to cultivate informed citizens who, through their knowledge and actions, contribute to the protection and prevention of environmental degradation. Increasing knowledge in this field appears to lead to changes in individuals' attitudes, behaviors, and ultimately influences environmental policies. Environmental behavior refers to the action's individuals take in their interaction with the environment. People exhibit different behaviors toward the environment based on their social, cultural, and personal circumstances. These behaviors can range from completely environmentally friendly and responsible to the opposite, being completely negative and detrimental to the environment. Environmentally friendly behavior refers to conscious actions intended to lessen the negative effects of individual actions on the natural and human-made world (including reducing energy and resource consumption, using nontoxic materials, and minimizing waste generation). Responsible environmental behaviors encompass a range of individual actions within a society towards the environment, incorporating a wide spectrum of emotions, preferences, and predispositions for environmental conduct.

The current environmental crisis is because of not having enough information of humans in managing the environment sustainably. In the present century, human environmental behaviors have garnered significant attention from environmental sociologists as influential factor affecting the environment. Environmental behaviors not only influence a wide range of environmental issues and threats but are also influenced by various factors themselves. Environmental awareness and understanding of environmental issues are influential variables in shaping environmental behaviors. Over the past 30 years, conditions have progressed to the point where the importance of discussing environmental issues has increased due to an understanding of the long-term consequences of these issues on human lives. Gradually, with the increasing social and economic costs resulting from environmental damage, communities and authorities have been prompted to seek solutions.

One of the strategies to avoid environmental harm and prevent its destruction is to change human behavior towards nature-oriented dimensions. Many environmental groups have made great efforts to increase public knowledge and awareness. The solution to many environmental issues is to raise environmental awareness.

2.4 Organizational Intelligence

Ability and capability of an organization is considered as organizational intelligence, the cognitive abilities of the organization and focus them towards achieving the mission, vision, and strategic goals of the organization (Elhian, 2008). This capacity is a combination of technical and human capabilities, referred to as human intelligence and machine intelligence. Technical intelligence represents the organizational capacity for processing computer-based knowledge and information, which has a significant impact on the exchanges within modern organizations. However, human intelligence is considered much more important than technical intelligence because successful utilization of information technology relies on human intelligence, that is, cognitive skills. Matsuda (1992), a Japanese scholar, is one of the proponents of organizational intelligence theory, and he defines organizational intelligence is the result of combining machine and human intelligence. The organizational intelligence model introduced by Matsuda promotes the integration of human-based problem-solving skills and machinebased knowledge processing capabilities. In contrast to many scholars, Matsuda emphasizes that machine intelligence is an integral part of organizational intelligence. Matsuda defines organizational intelligence as a group of human and machine intelligence that are interactive, cumulative, and coordinating inside the organization. Additionally, he considers organizational intelligence both as a process and a product.

Organizational intelligence as a process refers to the analysis, design, and effective performance of organizational knowledge, information processes, and problem-solving within the organization. As a product, organizational intelligence takes information

system design into account, based on the needs of organizational intelligence. Ercetin et al. (2007) describes organizational intelligence as the utilization of the organization's potential to make quick and accurate decisions, strive for continuous learning, employ creativity, and demonstrate different skills in unexpected and critical situations, which helps the system adapt to changes (Potas et al., 2010). He considers organizational intelligence as the accumulation and utilization of capabilities that allow the organization to maintain its dynamism. The capabilities include:

- Quick response and reaction
- Rapid adaptation to changes
- Flexibility in functioning
- Sensitivity and predictability
- Open-mindedness
- Use of imaginative power
- Innovativeness (Ercetin et al., 2007)

These capabilities enhance the power of the organization in identifying environmental opportunities, converting information into valuable knowledge, and increasing its long-term adaptive power. Leibowitz (2000) defines organizational intelligence as the sum of all intelligences used to create a shared perspective, review and revision process, and overall system guidance. Glynn (1996) believes that organizational intelligence is the result of the social interaction and collaboration of individual members' intelligence. A social process called organizational intelligence is developed using theories of human intelligence. The capital of organizational intelligence includes the abilities, skills, and experiences of managers and employees at various levels of the organization, as well as the expert opinions of specialists and consultants (Glynn, 1996).

A company's ability to mobilize its cognitive capacities and direct them toward accomplishing its mission is known as organizational intelligence. Having a thorough understanding of every aspect affecting the organization is referred to as organizational intelligence. It involves having deep knowledge about all stakeholders and the operations and processes of the organization (financial, sales, production, human resources, etc.) that significantly affect how well management choices are made within the company. Making educated decisions about every aspect impacting businesses and organizations is made possible by organizational intelligence (Howson, 2008).

Some scholars have examined organizational intelligence from three perspectives, which are: cognitive, behavioral, and emotional-social. These three perspectives aim to integrate different ways of thinking to provide the management and organizational development literature's thorough grasp of organizational intelligence (Howson, 2008).

The social process of organizational intelligence is based on theories of individual intelligence that have been overlooked until now. The application of individual intelligence has not been able to define the social component of organizational intelligence (Akgun et al., 2007).

Simultaneously with organizational intelligence, the prevalent ways of thinking that obstruct the development of organizational intelligence have been studied under the heading of organizational sluggishness. Organizational sluggishness is defined as common modes of thinking and leadership (Ercetin et al., 2007). Successful organizations adapt to market changes, technology, competitors, and products, continuously creating new knowledge. Creating knowledge can serve as a lever for learning and organizational development and foster continuous learning within the organization. Organizations that successfully utilize organizational intelligence can better utilize human resources, design rational planning, achieve their goals, discover hidden capacities, have a cohesive and systemic organizational thinking, and contribute to its development. Intelligent organizations continuously manage and coordinate information and knowledge to meet customer needs. These service-oriented organizations strive to thrive in a dynamic economy by developing their cognitive functions (Potas et al., 2010).

The research hypotheses are based on the knowledge gained from the literature review and are as follows:

- Vitality has a positive effect on senior managers' attitude towards sustainable tourism.
- Vitality has a positive effect on organizational intelligence of senior managers in tourism agencies.
- Organizational intelligence has a positive effect on senior managers' attitude towards sustainable tourism.
- Vitality has a positive effect on senior managers' attitude towards sustainable tourism with the mediating role of organizational intelligence.
- Vitality has a positive effect on senior managers' attitude towards sustainable tourism with the moderating role of environmental awareness.

2.5 Research Background

• Altunel and Yalçın (2022) presented research titled "Examining the Relationship between Subjective Vitality as a Personality Trait, Experience Quality, and Environmental Stewardship of Tourists Visiting Atatürk Arboretum." This study investigates vitality as a personal characteristic and resource in relation to garden tourism and outdoor recreation. The study showed that vitality has a positive and significant impact on the quality of experience. Furthermore, behavioral intention is positively impacted by experience quality, and behavioral intention isalso

impacted by experience quality. This suggests that a positive experience may strengthen a visitor's bond with the park, increase their willingness to conserve the part, and increase the likelihood that they will return and support it.

- Šaparniene et al., (2022) presented research titled "Expression of Behavior and Attitudes toward Sustainable Tourism in the Youth Population: A Search for Statistical Types." The research instrument that the authors created is a special tool that responds empirically to the most recent theoretical models and insights. It was verified using statistical techniques like factor analysis, Cronbach's alpha coefficient testing, and more. The SUS-TAS scale was utilized to gauge the level of attitude regarding sustainable tourism. To classify young people statistically according to how they express sustainable behavior and how they feel about sustainable tourism, the study used cluster factor analysis. According to the results, most young people (50.6%) fit the "sustainable behavior assured" type, whereas 71.5% of young people's attitudes fit the socio-economic type, suggesting that young people place a higher priority on long-term socio-economic well-being. Achieving these initial needs community involvement, efficient management, and well-planned tourism initiatives.
- Song et al., (2022) conducted research titled "Exploring Residents' Perceptions and Attitudes towards Sustainable Tourism Development in Traditional Villages: The Lens of Stakeholder Theory." One of the most well-known traditional villages in China, Hongcun, was the site of semi-structured interviews with 12 different stakeholders for this qualitative study that was based on stakeholder theory, with the purpose of adding to the literature. This study found multiple sub-themes that impact the four main domains of economic, environmental, social, and cultural sustainability. It also used a theoretical background approach to show how residents' views and attitudes toward sustainable development differ across these domains.

Ravikumar et al., (2022) presented research titled "Community Perception and Attitude towards Sustainable Tourism and Environmental Protection Measures: An Exploratory Study in Muscat, Oman." This study was carried out in Muscat, the capital city of Oman, to find out what are the feelings of locals through the government's initiatives to promote tourism and conserve the environment. According to the study, the local population is aware of the advantages of increased tourism. The government must take steps to raise public awareness of the importance of supporting the preservation of historic sites. Furthermore, details about how small businesses, jobs, and other opportunities can benefit the community should be supplied.

Ko et al. (2022) presented research titled "Exploring Determinants of Tourists' Ethical Behavior Intention for Sustainable Tourism: The Role of Both Pursuit of Happiness and Normative Goal Framing." The findings of partial least squares path modeling recommended that tourists' ethical behavioral intentions are supported by goal-framing, which is activated when hedonic motivations are pursued.

- Khan et al. (2022) presented research titled "Residents' Satisfaction with Sustainable Tourism: The Moderating Role of Environmental Awareness." In the context of Pakistan's developing tourism industry, the study aimed to empirically assess the substantial influence of four sustainability dimensions in predicting locals' satisfaction with sustainable tourism development.
- Hossain et al. (2022) presented research titled "Emotional intelligence: how it influences tourist's environmentally responsible behavior" The 33-item organizational intelligence scale was replaced with a 16-item, four-dimensional scale after 395 responses were analyzed. These organizational intelligence dimensions and the aspects of environmentally responsible tourist behavior are shown to be related by the study. In contrast to other-emotional appraisal, which only has a positive impact on civil and persuasive actions, self-emotional appraisal has a positive impact on physical, persuasive, and civil actions but has no effect on financial performance. Diverse categories of tourists exhibit varying degrees of influence from other dimensions of organizational intelligence regarding their behavior related to environmental responsibility. These findings suggest the costeffective use of an organizational intelligence scale and examining the relationships between tourists' organizational intelligence and the extent to which travelers' environmental responsibility behavior, recommending tourism providers to strengthen specific dimensions of organizational intelligence to enhance tourists' environmental responsibility behavior, drawing from the literature.
- Choi et al. (2022) presented research titled "Measuring Residents' Attitudes towards Sustainable Tourism: Development of the Sustainable Tourism Attitude Scale (SUS-TAS)." The purpose of this research is to develop and validate the SUS-TAS scale, which measures locals' attitudes toward sustainable tourism. Following the phase of pilot testing, 800 households in a small Texas tourism community were given a 51-item scale assessing their views toward social sustainability in tourism. The psychometric characteristics of SUSTAS are examined, as well as the theoretical and practical ramifications for the framework of sustainable tourism development.
- Aman et al. (2021) presented research titled "Impact of Tourists' Environmental Awareness on Pro-Environmental Behavior with the Mediating effect of Tourists'

Environmental Concern and the Moderating Effect of tourist's Environmental Attachment." Analysis of the data reveals that environmental awareness, environmental concerns, and environmental attachment are major and positive determinants of pro-environmental behavior, based on a sample of 426 tourists who have visited a valley. The relationship between environmental awareness and pro-environmental behavior is moderated by environmental attachment. This study emphasizes how critical it is to raise tourists' awareness of environmental issues in order to guarantee the expression of environmentally friendly behaviors.

- Selcuk et al. (2021) presented research titled "Comparative Analysis of Residents' Attitudes towards Sustainable Tourism Development Using a Multi-Criteria Decision-Making Technique." This study's primary goal was to compare the effects of various resident groups, both domestic and foreign, on their perceptions of the development of sustainable tourism. This study used the multi-criteria decision-making technique to examine, for the first time, the causal relationships between background factors influencing residents' attitudes toward sustainable tourism development. Furthermore, the DEMATEL technique was employed to analyze sub-criteria that determine the impacts of sustainable tourism on the environment, society, economy, and culture. The study's conclusions showed that, although seasonality affected locals more, environmental advantages affected foreign residents more. Environmental, cultural, and social benefits were the factors that affected local residents the most, whereas social and cultural benefits affected foreign residents the most. The study's findings offer insightful information to travelers planning their destinations..
- Song et al. (2021) presented research titled "Exploring Residents' Perceptions and Attitudes towards Sustainable Tourism Development in Traditional Villages: The Lens of Stakeholder Theory" this study aims to add to the existing body of literature by conducting semi-structured interviews with 12 distinct stakeholders in Hongcun, China, a well-known traditional village. The interviews were based on stakeholder theory. The study's grounded theory methodology allowed it to show how different residents' views and opinions about sustainable development are in four key areas: the social, environmental, cultural, and economic dimensions. An impact on these four domains was found for a number of subthemes. For the present sustainable tourism development in traditional villages, the study's conclusions have important theoretical and practical ramifications. Particularly, these results hold valuable insights for the national level, society, and businesses in terms of sustainable rural tourism development according to the opinions and viewpoints of the locals.
- Cardinali et al. (2020) presented research titled "Sustainable Tourism Attitude and Preference in Italian Adults: Value Orientation and Psychological Need

Satisfaction." There were 142 adult Italians (M = 42.11 years, 80% female) among the participants. An online survey method and the snowball sampling technique were employed in the study. The results showed that the participants had strong preferences for and positive attitudes toward sustainable tourism. Positive correlations were discovered between positive attitudes toward self-transcendence, sustainable tourism, and satisfying basic psychological needs. Furthermore, regression analysis showed that fundamental psychological needs are met, and that people's values and preferences for sustainable lodging account for their attitudes toward sustainable tourism. These results imply that understanding how to engage people in environmental sustainability requires giving psychological needs top priority.

- Obradovic and Stojanovic (2020) presented research titled "Measuring Residents' Attitudes towards Sustainable Tourism Development: A Case Study of the Gradac River gorge, Valjevo (Serbia)." With 28 items that exhibit both internal consistency and structural validity, the study's seven-dimensional SUS-TAS model is supported by the data. As demonstrated by the study's findings, the Gradac River Valley community genuinely supports eco-friendly travel in the area. A community's tourism industry cannot succeed or be sustained over the long run unless the local population supports it, according to research on attitudes toward tourism development. The findings of this research offer valuable managerial insights for the development of tourism in Serbia's Gradac River Valley, particularly the necessity of incorporating locals' perspectives into planning and decision-making processes. It is feasible to prioritize management strategies while upholding the rights and needs of the local community by being aware of the attitudes that locals have toward sustainable tourism.
- Zhu et al. (2017) presented research titled "Residents' Attitudes towards Sustainable Tourism Development in a Historical-Cultural Village: The Influence of Perceived Impacts, Sense of Place, and Tourism Development Potential." The study examined locals' opinions of sense of place, potential for tourism development, perceived effects of tourism, and support for tourism development. 331 completed questionnaires were gathered in Luozhou, a Chinese historical-cultural village. Structural Equation Modeling (SEM) was used to analyze the empirical data. The results showed that support for tourism development was significantly positively impacted by perceived collective benefits, in contrast to the other 3 perceived impacts. Residents' sense of place was significantly correlated with their perceptions of the group and individual benefits, their personal costs, and their support for the growth of the tourism industry. Moreover, the perception of local people about tourism development has a crucial impact on

their support for tourism development. Some practical ramifications of these findings are also discussed in relation to tourism planning and development.

- Hsieh et al. (2020) presented research titled "A Comparison Model of Residents' and Tourists' Attitudes towards Sustainable Tourism Development: A Case of Penghu Island in Taiwan." Participation of locals and visitors as stakeholders is required for the development and promotion of sustainable tourism planning and development. Quantitative methods have been used to investigate how locals and visitors feel about the development of sustainable tourism. The purpose of this study was to close this research gap. For this research focused on Taiwanese visitors to Penghu Island and island residents. Structural Equation Modeling (SEM) was utilized to determine the directions and relationships between five sets of tourism development impacts and support for sustainable tourism in Penghu following the administration of web-based online surveys. According to the results of their attitude models, the positive economic and cultural dimensions significantly influenced the residents' and tourists' support for sustainable tourism development.
- Karytsas et al. (2019) presented research titled "Factors Affecting Residents' Attitudes toward Sustainable Tourism Development." In order gain information about perceptions and attitudes of locals, a survey was carried out in nearby towns. The survey's findings show that locals are largely in favor of the small-scale development of areas, mostly as parks and tourist attractions. The creating new jobs, achieving local development, increasing investment, unplanned urban expansion, and an increase in the number of migrants are among the negative and positive effects that respondents believe can result from the development of tourism facilities on a larger scale. Positive economic, infrastructure, and environmental effects as well as negative environmental, social, and cultural effects were the six categories that the effects were divided. The following factors have a major impact on the opinion of local people regarding the potential for tourism development: a) gender; b) educational attainment; c) proximity to the coast; d) favorable economic effects; and e) unfavorable effects on the environment and culture. The social exchange theory is supported by empirical evidence due to the noteworthy influence of potential effects.
- Adongo et al. (2018) conducted research titled "Tourists' values and empathic attitude toward sustainable development in tourism." Tourism has a crucial role in increasing awareness of and interest in the attitudes and behaviors of tourists, as well as global efforts for sustainable development. Data from 819 tourists were analyzed by structural equation modeling. The study shows that, as components of sustainable tourism development, values are significant predicators of sympathetic attitudes toward environmental preservation, community

development, and ethical tourism. The findings show that respondents' opinions on these matters varied significantly depending on their gender, religion, history of visiting natural areas, and involvement in environmental organizations. The study concludes that moral principles are essential to fostering sympathetic views toward the growth of sustainable tourism.

• Mezhnova et al. (2016) presented research titled "International tourists' awareness and attitude about environmental responsibility and sustainable practices." This study also investigated that how foreign visitors' attitudes toward eco-friendly hotel and tourism practices in South Korea were influenced by their nationality. Focused group interviews were used in this study to collect public opinion. The interview session for the study consisted of six interviews with small groups of five people each. The United States, China, and the CIS countries (such as Russia, Kazakhstan, Uzbekistan, and Azerbaijan) were the three primary international visitor groups to Korea included in this study. According to the research, visitors' degree of environmental awareness can influence in their attitudes and, in turn, their buying habits. Respondents with high levels of awareness said they were prepared and eager to engage in environmentally friendly practices in the tourism and hospitality industries. Regarding how nationality affects tourists' attitudes, the results of this study run counter to those of another research.

3 Methodology

3.1 Type and Research Method

This research is considered practical in terms of its objective. The current research method is descriptive-correlational using a survey approach (which involves using a survey questionnaire in the research topic and interpreting the descriptive results to achieve the research objectives). Descriptive research describes and interprets what exists and pays attention to existing relationships and processes at the present time. In addition, in terms of analyzing correlations between variables and developing hypotheses, this research is correlational in nature.

3.2 Research Variables

A variable is defined as something that can take on different numerical values in various tests, and it is something that can change its value. Therefore, anything that a researcher

can observe, control, or intervene in its characteristics is considered a variable (Khaki, 2021, p. 128).

• Independent Variable (Predictor):

The variable which provides an explanation and prediction for the dependent variable is known as the independent variable. The researcher measures, modifies, or chooses this for assessing how it relates to other variables. As Khaki (2012) notes, "the independent variable affects the dependent variable positively or negatively." Vitality is regarded as the independent variable in this study.

• Dependent Variable (Response or Criterion):

The dependent variable is impacted by the independent variable and changes because of its variations, which should be mentioned in the definition. The researcher's intention forecast or explain this variable's variability (Khaki, 2012, p. 126). In this research, the attitude towards sustainable tourism and its dimensions, including the cultural dimension, environmental dimension, economic dimension, and social dimension, are considered as the dependent variable.

3.3 Population

The population in this study is the managers of travel and tour agencies worldwide. Conducting research on the entire population is time-consuming and costly. Therefore, according to the principles of statistical sampling, we need to sample from a selected group or a subset of the larger population, denoted by "n." Simple random sampling will be the sampling technique for the study, and the sample size will be decided using the Cochran formula while considering the small population.

3.4 Sample and Sampling Method

If the claim is about the parameter mean and the data are measured on a ranked scale (such as Likert scale), and if the population size is unknown or very large (i.e., the population is infinite), the Cochran formula is used for an infinite population to calculate the size of the sample. This formula is used:

$$n = \frac{(1.96^2 \times 0.5 * 0.5)}{(0.05)^2} = 384.16$$

The confidence level is represented by a Z-score, which is a constant value used in the sample size formula. The value of the Z-score is typically 1.96 for a 95% confidence level, assuming a normal distribution. In this research, the population and sample consist of travel agencies that are members of WATA (World Association of Travel Agencies).

WATA was founded on May 5, 1949, when eight professional travel agencies from France, Italy, Belgium, and Switzerland gathered in Geneva to establish an international institution for improving and rationalizing international tourism organization. However, it quickly evolved into an institution for establishing connections with active companies in the tourism industry. Its headquarters are in Switzerland, and representatives from more than 150 countries are members of this organization. Through its website, you can obtain email addresses and other details of the agency representatives. If an adequate sample is not available, purposive sampling method is used. Various tools can be used to extract data from respondents or to obtain data from observations, such as surveys, interviews, participant observations, etc.

3.5 Data Collection Method

This research has 2 data collection methods, library research and field research. Library Research refers to the information on the subject, which was gathered from library resources, articles, and required books. Using data extraction tools is part of the data collection process during this phase. Field Research refers to a questionnaire that is utilized as the data collection tool in this phase, which uses a cross-sectional method of data collection. Once the concepts and research hypotheses are clearly formulated, and the initial and essential information related to them is obtained and prepared, the questionnaire is designed. Standardized questionnaires is utilized in this study.

3.6 Components of questionnaire

The questionnaire has two sections, general questions and specific questions. On one hand, the general questions aim to gather general information and demographic characteristics of the respondents. This section includes 4 questions related to age, gender, education, and service experience. On the other hand, the specific questions address the research's independent and dependent variables. These questions are standardized and have been modified for this study. Four questionnaires are used in this research, which are described as follows:

- Vitality: In this study, vitality is measured by a score obtained from a 7-item questionnaire by Ryan and Frederick (1997). The spectrum of the questionnaire ranges from strongly agrees with a code of 1 to strongly disagree with a code of 7.
- Attitude towards Sustainable Tourism: In this study, attitude towards sustainable tourism is measured using a 20-item questionnaire by Chris et al. (2006). The spectrum of the questionnaire ranges from strongly agrees with a code of 1 to strongly disagree with a code of 5. This questionnaire includes the following dimensions.

Table 1 Components of Sustainable Tourism Attitudes

Questionnaire	Component	Questions
	Cultural	1,6,13,19
Attitude Towards Sustainable Tourism	Environmental	2,4,7
	Economical	3,14,15,16,17,18,20
	Social	5,8,9,10,11,12

Source: Own Work

Environmental Awareness: In this study, environmental awareness refers to the total of 4 questions from the questionnaire of Hornibrook et al. (2015) and Junquera et al. (2012). The survey uses a 5-point rating system, with 1 denoting "strongly agree" and 5 denoting "strongly disagree".

Organizational Intelligence: It is a score that individuals obtain from the standardized Organizational Intelligence questionnaire developed by Albrecht (2003).

3.7 Validity

The degree to which a measurement tool accurately captures the intended construct is referred to as validity. It is important because if the measurement tool is not valid, the scientific research will be unreliable and invalid (Khaki, 2012, 242).

3.7.1 Face Validity

Factor analysis and face validity were both used to define the validity of the research instrument. The questionnaire was proved by the experts when it was designed, and its pertinent items selected for measuring the research variables. Their opinions were collected, and after considering their feedback and aligning the items with the measured variables, the questionnaire was validated in terms of face validity. Then, for assessing construct validity, factor analysis was employed.

3.7.2 Factor Analysis-based Validity

To assess the relationship and appropriateness of the sample in relation to pairs of variables, researchers employ the Kaiser-Meyer-Olkin (KMO) Sampling Adequacy test. If the correlation between variable pairs cannot be adequately explained by other variables, it may be unnecessary to proceed with factor analysis, as the sample's suitability for constructing a scale is not met. There are varying opinions among researchers concerning the minimum acceptable KMO statistic. Nevertheless, Kaiser

(1977) recommends a minimum KMO value of 0.60 as a threshold. According to his guidance, factor analysis becomes viable when the KMO value exceeds 0.60, with higher values indicating more favorable sample suitability. The KMO statistic is rated on a scale from 0 to 1. Generally, data that is ill-suited for factor analysis exhibits a KMO value below 0.50. Values exceeding 0.70 are indicative of robust correlations suitable for factor analysis, while values ranging from 0.50 to 0.70 are considered to reflect moderate data quality.

Bartlet Test of Sphericity

For factor analysis to be meaningful, variables require to be correlated. If not, there is no need to create a factor model. The correlation matrix, that creates the basis of factor analysis, should not be equal to zero in the population to guarantee the suitability of data for factor analysis. This condition is inferred through Bartlett's test. The output of the Bartlett's test includes the chi-square statistic, degrees of freedom, and significance level. If the result happens to be significant, it indicates the presence of correlations among variables related to a factor. In other words, the hypothesis for Bartlett's test is stated below:

H0: The data are uncorrelated.

H1: The data are correlated.

Table 2 Kaiser-Meyer-Olkin (KMO) Statistic and Bartlett's Test Results

Variables	KMO	Bartlett's	KMO	Significance level
	statistic	statistic	statistic	(Sig)
Vitality	0.91	1955.071	21	0.001
Attitude towards sustainable Tourism	0.894	6740.864	190	0.001
Organizational Intelligence	0.889	5647.657	91	0.001
Environmental awareness	0.812	1009.670	6	0.001

Source: Own Work

According to the values in table 2, the KMO indicator of the variables' suitability for sampling and their dimensions is above 0.70, indicating sufficient sampling adequacy. Additionally, at a significance level of 0.000, the Bartlett's test of sphericity was successful for all variables and their dimensions, which is lower than the 0.05 and 0.01 levels of significance. This indicates that the null hypothesis H0 (data are uncorrelated) is rejected, confirming the appropriateness of employing factor analysis and the satisfactory validity of the data.

3.8 Reliability

Reliability of a questionnaire indicates the extent to which the questionnaire accurately and consistently extracts data and produces stable and consistent results over time (Khaki, 2012, p. 244). Various methods are used to calculate the reliability coefficient of a questionnaire. The most appropriate method for Likert scale measurement is Cronbach's alpha coefficient, which is calculated using SPSS software (Khaki, 2012, p. 245). The calculated value of this coefficient is presented in the following table. Higher questionnaire reliability is indicated by an alpha value that is closer to 1. A higher alpha value than 0.7 suggests strong reliability. If it falls between 0.5 and 0.7, it indicates moderate reliability. If it is less than 0.5, the questionnaire lacks sufficient reliability. Concerning the reliability of the questionnaire, 30 questionnaires were distributed to the statistical population as part of a pre-test., and the Cronbach's alpha coefficient obtained for the variables and their dimensions is presented in the following tables.

Table 3 Calculated Cronbach's Alpha Coefficients for Research Questionnaires

Factor	Cronbach's Alpha coefficient is 0.7 < (a)
Environmental awareness	0.893
Social Aspect	0.838
Economical Aspect	0.886
Environmental Aspect	0.704
Cultural Aspect	0.823
Vitality	0.919
Attitude towards sustainable Tourism	0.950
Organizational Intelligence	0.945

Source: Own Work

Table 3 shows the Cronbach's Alpha coefficient. The research variables have a Cronbach's Alpha coefficient greater than 0.7, which indicates that the questionnaires have good reliability.

3.9 Data analysis methods

In this study, the collected data will be analyzed using SPSS22 and Amos24 software. Descriptive statistics (data categorization and summarization) and inferential statistics (analysis and conclusion) will be presented. Before conducting statistical analyses, it is essential to ensure that the necessary assumptions for these analyses are met, as the use of different statistical tests depends on confirming or rejecting these assumptions.

3.9.1 Normality test of data (Kolmogorov-Smirnov test)

To examine the goodness-of-fit (GOF) of quantitative data, especially for testing the normality of samples, the Kolmogorov-Smirnov test is used.

Decision-making: The null hypothesis of normality is rejected at a 5% level of significance if the probability value, or p-value, is less than 0.05. In other words, it indicates that the distribution of the studied sample is not normal. Conversely, if the p-value is greater than or equal to 0.05, the null hypothesis is accepted, suggesting that the sample distribution is normal.

H₀ The sample does not have a normal distribution.

 H_1 The sample has a normal distribution.

3.9.2 Structural equation model (SEM)

Structural equation modeling is a versatile and robust method within the realm of multivariate analysis which can be categorized as an extension of the comprehensive linear model. It provides the researcher with the capability to concurrently assess multiple regression equations (Homan, 2012, p. 11).

A structural equation model is a specific causal structure between a set of latent variables and observed variables. In the structural equation model method, the relationships between hidden variables and the measurement items of each hidden variable can be investigated.

The structural equation model's variable relationships generally have two categories, the first category is: Measurement model or confirmatory factor analysis (CFA) which is

connections between manifest and latent variables. The second category is: Structural model or path analysis model which is connections between variables that are hidden. In this research, CFA was utilized to measure the relationships between hidden variables and their measurement items to verify the model. (Habibi, 2011). Researchers can create a model that explains or validates empirical data based on a limited number of parameters by using the CFA method. The previous knowledge about the data structure that forms the basis of this model may be in the form of a theory, hypothesis, particular classification scheme for indicators based on their observable characteristics, established empirical conditions, or prior knowledge from other studies. Finding out if the data is consistent with a given factor structure as stated in the hypothesis is the goal of confirmatory methods, also known as hypothesis testing (Homan, 2012, p. 15).

4 Discussion

4.1 Respondents' demographic characteristics

A) Distribution of Respondents' Gender

Table 4 indicates that out of the total sample of 384 participants, 38.7% were women and 61.3% were men. It can be observed that men had the highest frequency.

Table 4 Distribution of Respondents' Gender

Gender	Man	289	75.3
	Woman	95	24.7
	Total	384	100

Source: Own Work

B) Distribution of Respondents' Age

Table 5 indicates that out of the 384 respondents, 19.8% were aged less than 30, 41.1% were aged 31 to 40, 28.9% were aged 41 to 50, and 10.2% were above 50 years old. It can be observed that the age groups of 31 to 40 and 41 to 50 had the highest frequencies.

Table 5 Distribution of Respondents by Age

Age Group	Number	Percentage
30 year and Under 30	76	19.8
31 to 40 years	158	41.1
41 to 50 years	111	28.9
Above 50 years	39	10.2
Total	384	100

Source: Own Work

C) Distribution of Respondents' Experience

Table 6 indicates the analysis of respondents' years of experience, which showed that 1.21% had less than 7 years of service, 5.37% had 8 to 14 years of experience, 3.34% had 15 to 21 years of service, and 0.7% had more than 21 years of experience. It can be observed that the groups with 15 to 21 years and 8 to 14 years of experience had the highest frequencies.

Table 6 Distribution of Respondents' Experience

Years of experience	Number	Percentage
Less than 7 years	72	18.8
8 to 14 years	145	37.8
15 to 21 years	114	29.7
More than 21 years	53	13.8
Total	384	100.0

Source: Own Work

4.2 Descriptive statistics of research variables

The measures of central tendency and dispersion for the variables will be shown in this section.

A) Central indicators and dispersion of vitality variable

Table 7 (refer to appendix 1) shows that the mean of the vitality variable is 3.320, which is greater than the theoretical mean of 3. This suggests that respondents have chosen more favorable and neutral options. Similar results were obtained when examining the items of this variable. Furthermore, item 3 had the highest mean, while item 5 had the lowest mean. The range of values for kurtosis and skewness is (-2, 2), indicating that the data distribution is approximately normal.

B) Measures of Central Tendency and Dispersion for the variable 'Sustainable Tourism Attitude

• Table 8 (refer to appendix 1) indicates that the mean of the variable "attitude towards sustainable tourism" is 3.803, which is greater than the theoretical mean of 3, indicating that more favorable and neutral options were chosen. Similar results were obtained when examining the items of this variable. Furthermore, item 7 had the highest mean, while item 5 had the lowest mean. The data distribution is roughly normal since the skewness and kurtosis values fall between (2) and (2-).

C) Central Indices and Dispersion of Organizational Intelligence Variable

Table 9 (refer to appendix 1) showed that the mean of the organizational intelligence variable is 3.485, which is greater than the theoretical mean of 3. This suggests that the options of agreement and neutrality were more frequently chosen. Similar findings were obtained in the examination of the items of this variable. Additionally, item 7 had the highest mean, while item 1 had the lowest mean. The distribution of the data is roughly normal since the values of skewness and kurtosis are between (-2) and (2).

D) Central tendency and dispersion indices of the environmental awareness variable

Table 7 Mean of environmental awareness variable items.

Items	Mean	Standard deviation	Kurtosis	skewness	Min	Max
When I think about the damages caused by pollution, I get angry.	3.615	1.102	-0.511	-0.588	1	5
When I think about pollution caused by companies, I feel hopeless and upset.	3.461	1.162	-0.421	-0.718	1	5
Plastic bags, because they take centuries to decompose, contribute to pollution.	3.591	1.104	-0.519	-0.451	1	5
Nowadays, pollution is one of my main concerns.	3.508	1.131	-0.613	-0.283	1	5
Environmental Awareness	3.544	0.980	-0.521	-0.476	1	5

Source: Own Work

Table 10 showed that the mean of the environmental awareness variable is 3.544, which is greater than the theoretical mean of 3. This indicates that the respondents have chosen more favorable and neutral options. Similar results were obtained when examining the items of this variable. Additionally, Item 1 had the highest mean, while Item 2 had the

lowest mean. If the skewness and kurtosis values are between -2 and +2, it is assumed that the data distribution is roughly normal.

4.3 Inferential Analysis

In the inferential analysis section, first, the normality of the variables was examined using the Kolmogorov-Smirnov test. Then, the relationship between the dependent and independent variables was examined, and the research hypotheses were tested for acceptance or rejection using regression analysis and the Pearson correlation test.

4.3.1 Testing the normality of the variables.

Using the Kolmogorov-Smirnov test, the normality of the research variables was investigated. The variable is normally distributed, according to the null hypothesis (H0), but it is not, according to the alternative hypothesis (H1). The table below shows the results of the test.

 H_0 The sample does not have a normal distribution.

H₁ The sample has a normal distribution.

Table 8 Output of the Kolmogorov Smirnov test to check the normality of research variables.

Variable	significance	value of the Kolmogorov-Smirnov	Result
	level	statistic	
Vitality	0.021	0.187	Normal
Attitude towards sustainable	0.025	0.154	Normal
Tourism			
Organizational intelligence	0.033	0.068	Normal
Environmental Awareness	0.019	0.200	Normal

Source: Own Work

According to the Table 11, it was observed that the significance values of the variables were more than 0.05, and it was agreed that the data were normally distributed. The distribution of the data is normal since the values of kurtosis and skewness is ranged between -2 and +2.

4.3.2 Correlation test of research variables

The Pearson correlation test was used to investigate the relationships between the research variables, and the following are the findings:

Table 9 Pearson correlation test results

		Vitality	Attitude towards sustainable tourism	Organizational intelligence	Environmental Awareness
Vitality	Correlatio n P-value	1.000			
Attitude towards sustainable	Correlatio n	0.789**	1.000		
tourism	P-value	0.001			
Organizational intelligence	Correlatio n	0.720**	0.788**	1.000	
interrigence	P-value	0.001	0.001		
Environmental awareness	Correlatio n	0.582**	0.698**	0.778**	1.000
awareness	P-value	0.001	0.001	0.001	

^{**} Significant at the 0.01 level

Source: own work

The Pearson correlation test results indicated that, at the 0.01 significance level, there is a significant correlation between the research variables.

4.3.3 Evaluation of the research model

In this section of the research, the conceptual model was evaluated utilizing the Partial Least Squares (PLS) structural equation modeling (SEM) approach. In PLS, the model fit is assessed in three parts:

- 1) Measurement model fit,
- 2) Structural model fit, and
- 3) Overall model fit (Goodness-of-Fit)(GOF).

1) Measurement model fit.

The measurement model, which consists of a variable and the corresponding measurement items, is a subset of the overall model. To evaluate the model of measurement fit, three criteria are examined: a) reliability, b) convergent validity, and c) discriminant validity (Hair et al., 2013: 86).

a) Reliability: It is assessed through three methods: 1) Factor Loadings, 2) Cronbach's Alpha, and 3) Composite Reliability.

1) Examination of Factor Loadings:

The calculation of factor loadings, which is based on the correlation between a construct's indicators and that construct, is one of the factors that is used to evaluate the instrument's reliability. Hulland (1999) suggests that if the factor loading value is equal to or greater than 0.3, when compared to its indicators, the construct's measurement error variance is greater, which indicates acceptable reliability for the model. However, if the factor loading value is less than 0.3, it is necessary to revise the questionnaire items or exclude them from the research model (Davari & Rezazadeh, 2013, 86).

The examination of factor loadings for the research items indicates, as shown in Figure (2), the other items' factor loadings are more than 0.5, suggesting that the model is reliable in this area.

2) Cronbach's Alpha:

Cronbach's Alpha is a classical measure used to assess reliability and is considered a suitable indicator for evaluating internal consistency. Moss et al. (1998) presented a cutoff value of 0.6 for variables that have a low quantity of items as the threshold for the Cronbach's Alpha coefficient. According to the Table 13, all variables have Cronbach's Alpha values higher than 0.7, that demonstrates good internal consistency and stability for the measurement models.

3) Composite Reliability:

Composite Reliability is a modern measure provided by PLS for assessing reliability. It calculates the reliability of constructs not in an absolute sense but based on their intercorrelations. A measurement model is considered to have good internal stability if the Composite Reliability (CR) value for each construct is greater than 0.7. According to the Table 13, all variables have Composite Reliability values more than 0.7, indicating suitable reliability and acceptable fit for the measurement models.

b) Convergent Validity: When evaluating the measurement model's fit, the average shared variance between each construct and its indicators is examined using the Average Variance Extracted (AVE) criterion. It means that the AVE value represents the degree of correlation that exists between each construct and the questions (indicators) that correspond to it, the higher this correlation, the better the fit. Magner et al. (1996) considered a value of 0.5 or higher as sufficient for AVE (Naderi-Beni et al., 2015, p. 181). According to the Table (13) the adequacy of Convergent Validity is confirmed.

Table 10 Convergent validity check

	Convergent Validity					
Factor	Cronbach's Alpha coefficient 0/7 < (a)	7 Composite reliability 0/7 < (CR)	Average Variance Extracted (AVE) 0.5 < (AVE)			
Environmental Awareness	0.893	0.927	0.761			
Social aspect	0.838	0.885	0.578			
Economic aspect	0.886	0.912	0.598			
Environmental aspect	0.704	0.834	0.629			
Cultural aspect	0.823	0.884	0.659			
Vitality	0.919	0.936	0.680			
Attitude towards sustainable tourism	0.950	0.955	0.525			
Organizational intelligence	0.945	0.953	0.594			

Source: own work

c) Discriminant Validity

The HTMT (Heterotrait-Monotrait) ratio of correlations was used to evaluate the discriminant validity of the model. This measure, proposed by Henseler et al. (2015), is a replacement for the traditional Fornell-Larcker criterion. The acceptable range for the HTMT measure is typically between 0.85 and 0.90. If the values of this measure are below 0.90, it indicates acceptable discriminant validity. In this method, the correlation between indicators of one construct is compared with their correlations with indicators of other constructs (Henseler et al., 2015, p. 71). (refer to appendix 1 for table 14)

4.3.4 Evaluation of the structural model

Unlike measurement models, the structural model does not deal with manifest variables (observed variables) but focuses on the latent variables and their relationships. Examining the following indicators is part of the structural model assessment: 1) significant coefficients (z-values or t-values), 2) R² Criterion 3) effect size measure f² 4) Q² Criterion

4.3.4.1 Significant coefficients z (t-values)

Examining significant coefficients Z is the first criterion for evaluating the structural model's fit. At a 95% confidence level, these coefficients surpass 1/96, indicating the

validity of the relationships between the latent variables and the research hypotheses. (Davari & Rezazadeh, 2013, p. 88). According to Figure 3 and Table 16, the t-values of the variables and their corresponding indicators are greater than 1.96 and statistically significant. As a result, the data validate the research hypotheses and the validity of the relationships between the constructs at a 95% confidence level.

4.3.4.2 R² Criterion

The second criterion for assessing the fit of the structural model is the R² coefficients associated with the endogenous (dependent) variables in the model. R² represents the influence of an exogenous variable on an endogenous variable, and values of 0.19, 0.33, and 0.67 are considered as benchmarks for weak, moderate, and strong R² values, respectively. A higher R² value for an endogenous construct indicates a better fit of the model. Henseler et al. (2009) suggest if an endogenous construct is influenced by one or two exogenous constructs in a model an R² value above 0.33 indicates a strong relationship between that construct and the endogenous constructs. However, if more exogenous constructs influence an endogenous construct, a higher R² value should be used as a benchmark for accepting the relationships (Davari & Rezazadeh, 2013, p. 89). According to Table 1 and Figure 2the R² values for the research variables are obtained at a strong level.

4.3.4.3 Impact size criterion (f²)

The third measure of assessing the fit of the structural model is the effect size (f^2). This metric shows how strongly the model's constructs are related to each other; values of 0.02, 0.15, and 0.35 denote small, medium, and large effect sizes. respectively, of one construct on another. This measure is applicable only in models where there are latent variables that are influenced by more than one exogenous variable (Davari & Rezazadeh, 2013, p. 89). The formula for calculating f^2 is provided below:

$$f^{2}(x \to y) = \frac{R^{2}y(X \ included) - R^{2}(X \ exluded)}{1 - R^{2}y(X \ included)}$$

In this study, the f^2 measure indicates a small effect size. The f^2 values for all variables are in the range of medium to large, indicating significant effects (Table 17).

4.3.4.4 Q² Criterion or Stone-Geisser Criterion

The fourth measure of assessing structural model fit is the Q^2 or the Stone-Geisser test. Stone and Geisser (1975) have introduced this measure which indicates the model's predictive power on the dependent variables. They believe that models that fit well enough should be able to predict the indicators that are connected to the latent variables

in the model. This means that will enable the constructs to sufficiently influence each other's indicators in a model if the relationships between them are defined correctly, that will validate the hypotheses. It is important to compute the Q2 value for each latent variable in the model. Henseler et al. (2009) defined three values, 0.02, 0.15, and 0.35, as indicators of weak, moderate, and strong capacity for prediction in the model for the latent variables. If the value of this measure is zero or less than zero, the model needs to be modified. The results in table 15, shows that the Q² values for the variables are in the strong range.

Table 11 Values of the evaluation criteria in the structural model of the sub-model

Variable	\mathbb{R}^2	\mathbf{Q}^2
Social aspect	0.830	0.446
Economical aspect	0.900	0.500
Environmental aspect	0.793	0.473
Cultural aspect	0.902	0.560
Attitude towards sustainable tourism	0.772	0/372
Organizational		
intelligence	0.537	0/287

Source: own work

4.3.5 Goodness of fit (GOF)

This model has components for both the structural and measurement models, and by verifying that they fit together, it can be said to be fully assembled. There is only one criterion, known as GOF, that is used to assess the overall model's fit. Tenenhaus et al. (2004) developed the GOF criterion, which is computed using the formula below. Three values for GOF—0.01, 0.25, and 0.36—were introduced by Wetzles et al. (2009) as weak, medium, and strong values (Davari & Rezazadeh, 2012, 90). The average value of R2 was 0.789 and the average value of shared values was 0.628 in the research sub-model. The GOF criterion value of 0/704 was obtained using the following formula, indicating strong fit of the overall research model according to Wetzells et al. (2009) classification.

$$GOF = \sqrt{\overline{Communalities} \times \overline{R^2}}$$

$$GOF = \sqrt{0.628 \times 0.789} = 0.704$$

4.4 Examining research models and hypotheses.

This section examines at the research's main hypothesis.

Figure of research path

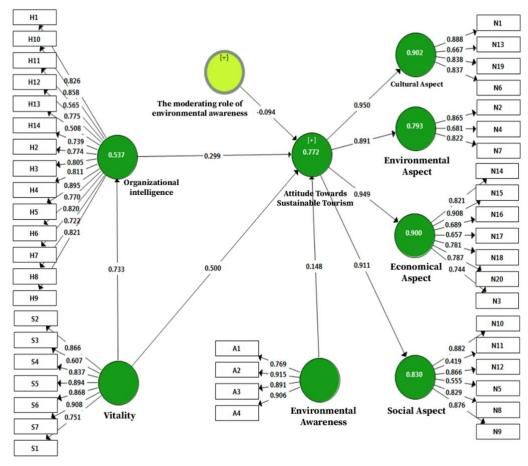


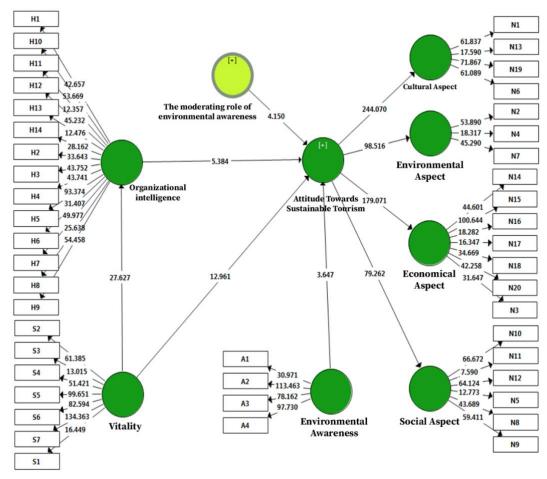
Figure 1 Factor Loadings in Standardized Estimation.

Source: Own Work

Figure 1 displays the factor loadings of the variables in the standard estimation state. As showed, the factor loadings are more than 0.5, indicating a good model fit.

t-values

Figure 2 t-values of relationships of the main research model



Source: Own Work

Figure 2 displays the t-values for the factor loadings and path coefficients in the main model of the research. It can be observed that the t-values for the factor loadings are more than 1/96, indicating that factor loadings are statistically significant.

Table 12 examines the direct relationships of research variables.

Criterion structure	Path Coefficient (β)	t- value	Statistical Significance Level	\mathbf{F}^2
Vitality —> Attitude towards sustainable tourism	0.500	12.961	0.001	0.474
Organizational intelligence —> Attitude towards sustainable tourism	0.299	5.384	0.001	0.203
Environmental awareness — > Attitude towards sustainable tourism	0.148	3.647	0.001	0.137
Vitality —> Organizational intelligence	0.733	27.627	0.001	0.461

Source: Own Work

Table 13 examining the indirect relationships of the research variables.

Criterion structure	Path Coefficient (β)	t- value	Statistical Significance Level
Vitality —> Organizational intelligence—> Attitude towards sustainable tourism	0.219	5.513	0.001
Vitality * Environmental awareness —> Attitude towards sustainable tourism	0.094	4.150	0.001

Source: Own Work

In tables 16 to 18, presented are the factor loadings in the standard estimation along with their significance level. When it comes to explaining the variance of the primary constructs, the factor loadings in the standard estimation show how much each observed variable (questionnaire item) and the latent variables (factors) are related. Stated differently, the correlation between each observed variable and the latent factors is showed by the factor loading. The judgment of the significance of the factor loadings is based on the t-value statistic. Considering that the significance is evaluated at the 0.05 level of significance, and as the t-value's absolute value is more than the crucial 1.96 value, all factor loadings are statistically significant.

Hypothesis 1: Vitality has a positive effect on the attitude towards sustainable tourism in senior managers of tourism agencies.

Based on hypothesis 1, the following test will be conducted:

H0: Serendipity does not have a significant positive effect on the attitude towards sustainable tourism in senior managers of travel agencies ($\beta = 0$).

H1: Serendipity has a significant positive effect on the attitude towards sustainable tourism in senior managers of travel agencies ($\beta \neq 0$).

Table 14 examining the impact of vitality on the attitude towards sustainable tourism.

	Path Coefficient (β)	t- value	P - value
Vitality —>Attitude towards	0/500	12/961	0/001
sustainable tourism	0/500	12/961	0/001

Source: Own Work

Based on the information provided, it can be observed from Table 19 and Figures 1 that the standardized coefficient between vitality and attitude towards sustainable tourism is equal to 0.500. Considering the absolute value of the t-value, which is 12.961 and more than 1/96, It indicates that the alternative hypothesis is supported, and the null hypothesis is rejected with a 95% confidence level. This shows that vitality has a significant positive effect on the attitude towards sustainable tourism (Significant= 0.001, β = 0.500). In other words, for each unit increase in vitality, the attitude towards sustainable tourism increases by 0.500 units.

Hypothesis 2: Vitality has a positive impact on organizational intelligence in senior managers of tourism agencies.

First, based on the above hypothesis, we conduct the following test:

H0: Vitality has no significant positive impact on organizational intelligence in senior managers of tourism agencies (β =0).

H1: Vitality has a significant positive impact on organizational intelligence in senior managers of tourism agencies ($\beta \neq 0$).

Table 15 examining the impact of vitality on organizational intelligence.

	Path Coefficient (β)	t- value	P - value
Vitality —>Organizational			
intelligence	0.733	27.627	0.001

Source: Own Work

The standard coefficient between vitality and the equivalent of organizational intelligence is 0.733, as determined by the factor loading in Table 20 and Figures 1 and 2. Additionally, the level of t value's absolute value is equal to 27.627, which is greater than 1.96. Thus, it can be said that there is a 95% chance that the contrary hypothesis is true, and the null hypothesis is not. So, the vitality factor has a positive and significant effect on organizational intelligence (significance = 0.001; β = 0.733), it means that a unit increase in vitality equals a 0.733 unit increase in organizational intelligence.

Hypothesis 3: Organizational intelligence has a positive impact on attitude towards sustainable tourism in senior managers of tourism agencies.

First, based on the above hypothesis, we conduct the following test:

H0: Organizational intelligence has no significant positive impact on sustainable tourism orientation in senior managers of tourism agencies ($\beta = 0$).

H1: Organizational intelligence has a significant positive impact on sustainable tourism orientation in senior managers of tourism agencies ($\beta \neq 0$).

Table 16 examining the impact of vitality on organizational intelligence.

	Path Coefficient (β)	t- value	P - value
Organizational intelligence —> Attitude towards sustainable	0.29	5.384	0.001
tourism			

Source: Own Work

Based on the standardized coefficients in Table 21 and Figures 1 and 2, it can be observed that the standardized coefficient between organizational intelligence and Attitude towards sustainable tourism is 0.299. Moreover, considering the absolute value of the t-value, which is 3.845 and higher than 1.96, it can be said that the alternative hypothesis is verified, and the null hypothesis is not supported. Thus, it can be concluded, with a 95% confidence level, that organizational intelligence significantly enhances the focus on sustainable tourism. (significant = 0.001; β = 0.299). In other words, for every one unit increase in organizational intelligence, sustainable tourism orientation increases by 0.299 units.

Hypothesis 4: Vitality has a positive effect on the attitude towards sustainable tourism with the mediating role of organizational intelligence in senior managers of tourism agencies.

To test the hypothesis regarding the mediating role of organizational intelligence, the following analysis is conducted:

H0: Resilience does not have a significant and positive effect on sustainable tourism orientation with organizational intelligence as a mediator ($\beta = 0$).

H1: Resilience has a significant and positive effect on sustainable tourism orientation with organizational intelligence as a mediator ($\beta \neq 0$).

Table 17 examining the impact of vitality on the attitude towards sustainable tourism with the mediating role of organizational intelligence.

	Path Coefficient (β)	t- value	P - value
Vitality—> Organizational			
intelligence —>			
Attitude towards sustainable	0.219	5.513	0.001
tourism			

Source: Own Work

Based on the factor loadings in Table 22 and Figures 1 and 2, it can be observed that the standardized coefficient between resilience and sustainable tourism orientation with organizational intelligence as a mediator is 0.219. Furthermore, the alternative hypothesis is validated and the null hypothesis is not supported, with a 95% confidence level, taking into account the absolute value of the t-value, which is 5.513 and greater than 1.95. This indicates that resilience has a significant and positive effect on sustainable tourism orientation with organizational intelligence as a mediator $(0.001 = \text{significance}; 0.219 = \beta)$. In other words, for each unit increase in resilience, sustainable tourism orientation with organizational intelligence as a mediator increases by 0.219 units.

Hypothesis 5: Vitality has a positive effect on the attitude towards sustainable tourism with the moderating role of environmental awareness in senior managers of tourism agencies.

First, based on the above hypothesis, the following test will be conducted:

H0: Resilience does not have a significant and positive effect on sustainable tourism orientation with environmental awareness as a moderator in senior managers of travel agencies ($\beta = 0$).

H1: Resilience has a significant and positive effect on sustainable tourism orientation with environmental awareness as a moderator in senior managers of travel agencies ($\beta \neq 0$).

Table 18 examining the impact of vitality on the attitude towards sustainable tourism with the moderating role of environmental awareness.

	Path Coefficient (β)	t- value	P - value
Vitality* Environmental			
awareness —>			
Attitude towards sustainable	0.094	4.150	0.001
tourism			

Source: Own Work

Based on the factor loadings in Table 23 and Figures 1 and 2, the standardized coefficient between resilience and sustainable tourism orientation with environmental awareness as a moderator is 0.094. Additionally, considering the absolute value of the t-value, which is 1.504 and greater than 1.96, the alternative hypothesis is confirmed, and the null hypothesis is not supported, with a 95% confidence level. This shows that resilience has a significant and positive effect on sustainable tourism orientation with environmental awareness as a moderator (significance =0.001, β = 0.094). In other words, for each one-unit increase in resilience, sustainable tourism orientation with environmental awareness as a moderator increases by 0.094 units.

The results of the hypotheses are summarized in Table 24 (refer to appendix 1)

4.5 Findings

4.5.1 Descriptive Findings of the Study Population

Total of respondents were 384, 38.7% of them were female and of them were 61.3% male, with males being the majority. Age-wise, the age ranges with the highest frequencies were 31–40 and 41–50. Regarding work experience, the groups of 15-21 years and 8-14 years had the highest frequencies.

4.5.2 Descriptive Statistics Findings

The mean scores of variables such as job satisfaction, attitude towards sustainable tourism, organizational intelligence, and environmental awareness, as well as their corresponding indicators, were higher than the theoretical mean of 3. This indicates that respondents tended to choose options in agreement or neutral. Given that the skewness and kurtosis values fell between -2 and +2, it can be said that the data distribution was roughly normal.

4.5.3 Inferential Findings of the Research

In this research, the measured variables were first assessed for their normal distribution using the Kolmogorov-Smirnov test. According to the results in Table 11, it was determined that the variables followed a normal distribution. The research data was analyzed using the partial least squares (PLS) method that comes with the SmartPLS software.

For the measurement model fit, three criteria were used: factor loadings, Cronbach's alpha reliability coefficient, composite reliability, and AVE. The convergent validity (composite reliability and extracted variance) and discriminant validity (cross-loadings) were assessed. Based on all three criteria, the results in Tables 12 to 13 verified that the measurement model fit the data.

For the structural model fit, four criteria were utilized: significance of path coefficients, coefficient of determination (R-squared), Stone-Geisser's Q2, and effect size measures. Based on all four criteria, the results of Tables 14, 15, and Figure 1 verified the structural model's fit.

4.6 Development of hypotheses

Vitality is considered an important and influential factor in life quality in this perspective, increasing the value of life quality is strongly linked to a vitality, leading to a stronger sense of belonging among individuals to their living environment. Adongo et al. (2018) argue that higher levels of vitality can result in a stronger sense of attachment to the living environment and tourism, leading to increased environmental protection. Vitality is a fundamental concept that overlaps with indicators such as sustainability, quality of life, quality of place, and healthy communities. Depending on the scope and context of its application, the concept of vitality can be broad or limited. Vitality can be achieved through physical well-being, ecological sustainability, solving social problems (inequality, racial disparities, etc.), economic factors (unemployment, poverty, etc.), environmental aspects (noise and environmental pollution reduction), and cultural aspects (violence, etc.) (Perogordo, Madrid, 2007). Altunel and Yalcin (2022) found in their research that mental vitality has a significant impact on attitudes towards sustainable tourism, while Ko et al. (2022) demonstrated that vitality significantly affect sustainable tourism. However, the correlation of vitality and attitudes towards sustainable tourism is still not fully understood. Therefore, vitality can have a considerable impact on solving social and environmental problems. As a result, the following is the first hypothesis:

• Vitality has a positive impact on attitudes towards sustainable tourism among senior managers of travel agencies.

Ercetin et al. (2007) defined organizational vitality as the utilization of the organization's potential to make quick and accurate decisions, continuous learning, creativity, and demonstrating different skills in unexpected and critical situations, leading to better alignment with the organizational system. A more dynamic work environment produced by vital employees encourages greater motivation and produces better results in terms of learning, creativity, and skill acquisition. In previous research, Kaveh (2021) showed that individuals' vitality is an important element influencing employees' efforts and creativity. Khodayi et al. (2017) found in their study that a sense of vitality in the work environment has a significant impact on increasing motivation and employee innovation. As a result, the following is the second hypothesis:

• Vitality has a positive impact on organizational intelligence among senior managers of travel agencies.

Tarlani and Gharineh (2010) consider organizational intelligence as the acquisition of comprehensive knowledge and information, encompassing knowledge from all factors that influence the organization. These factors include information from customers, superiors, competitors, economic and environmental conditions, cultural environment, and organizational processes (financial, administrative, security, production, human resources, budgeting, etc.) that greatly affect the quality of management decisions in the organization. Since the environment is a significant component of their work environment, increased organizational intelligence among employees in tourism organizations emphasizes the importance of protecting and enhancing the work environment, which in turn leads to a more positive attitude toward sustainable tourism. While researchers have not given much attention to the relationship between organizational intelligence and attitudes toward sustainable tourism, Abdoli et al. (2021) demonstrated in their research that cultural intelligence within the organization leads to an increased perceived value of sustainable tourism. As a result, the following is the third hypothesis:

• Organizational intelligence has a positive effect on the attitude towards sustainable tourism in senior managers of travel agencies.

As mentioned, vitality among employees leads to increased energy and a better sense of the work environment, which improves employees' motivation for work. It also fosters their inclination towards creativity, innovation, learning, and environmental protection in the workplace. Although no direct research has examined this hypothesis, Ko et al. (2022) demonstrated in their study that happiness and vitality in sustainable tourism have a significant impact. Abdoli et al. (2021) showed that cultural intelligence within the organization leads to an increased perceived value of sustainable tourism. Furthermore, Hossian (2022) found in their research that organizational intelligence positively

influences responsible tourism behavior. As a result, the following is the fourth hypothesis:

• Vitality has a positive impact on the attitude towards sustainable tourism, with the mediating role of organizational intelligence among senior managers of travel agencies.

Ivan (2020), in his book on vitality, argues that vitality is like a coin with two sides. One side addresses the fulfillment of basic life needs, while the other side focuses on environmental sustainability. On the other hand, livelihood should be sustainable because if production resources, employment, and income are secured but the environmental space is deficient or damaged, the problem of livelihood will not be solved. Therefore, when employees have a high level of environmental awareness within the organization, combined with a sense of enthusiasm and vitality in the work environment, it leads to greater efforts in environmental conservation. Thus, awareness of sustainable tourism has a major influence on attitudes toward sustainable tourism, as Khan et al. (2022) foundin their study. Aman et al. (2021) also found in their research that environmental awareness among tourists has a meaningful impact on pro-environmental behavior. As a result, the following is the fifth hypothesis:

• Vitality has a positive and meaningful impact on the attitude towards sustainable tourism, with the moderating role of environmental awareness among senior managers of travel agencies.

This research aimed to examine the impact of vitality on the attitude towards sustainable tourism among senior managers of travel agencies. The hypotheses related to the research topic were presented and validated or rejected.

Examining the first hypothesis, which focused on the "impact of vitality on the attitude towards sustainable tourism," showed that vitality has a positive and significant effect on the attitude towards sustainable tourism. In other word, a greater sense of vitality causes a greater attitude toward environmentally friendly travel. This finding is consistent with additional research. Consistent with the results of this study, Altunel and Yalcin's (2022) research demonstrated that attitudes toward sustainable tourism are significantly influenced by mental health. Additionally, Ko et al. (2022) found that vitality have a meaningful effect on sustainable tourism, which is like the results of this research. Considering these results, it is obvious that sense of enthusiasm and high energy levels among travel agency managers and young tourists lead to a greater inclination towards tourism while also prioritizing environmental conservation. Vitality enhances the sense of empathy towards the environment, and energetic tourists and young managers are more inclined towards sustainable tourism practices.

Examining the second hypothesis, which focused on the "impact of vitality on organizational intelligence in senior managers," revealed that Organizational intelligence is positively and significantly impacted by vitality. Stated differently, an increase in vitality corresponds to an increase in organizational intelligence. Studies from the past support this conclusion. For example, Kaveh (2021) and Khodayi et al. (2017) demonstrated in their respective studies that organizational intelligence, vitality, and enthusiasm are significantly correlated, which agrees with the result of this study.

This hypothesis can be explained by saying that when managers and staff feel alive and enthusiastic at work and approach their daily tasks and activities with more energy, they are more motivated to perform their jobs well, build strong working relationships, put in more effort, and feel good about their jobs and themselves.

Examining the third hypothesis, which investigated the "effect of organizational intelligence on the attitude towards tourism," showed that the attitude toward sustainable tourism is positively and significantly impacted by organizational intelligence. In other words, an increase in organizational intelligence leads to a higher positive attitude towards sustainable tourism. Studies from the past support this conclusion. For instance, Abdoli et al. (2021) demonstrated in their study that cultural intelligence in organizations contributes to the perceived value of sustainable tourism, which agrees with the study's findings. Additionally, Hussain et al. (2022) demonstrated, in line with the results of this study, that organizational intelligence significantly influences responsible tourism behavior.

In explaining this hypothesis, it can be stated that managers in the tourism industry who have higher levels of organizational intelligence value their work environment and strive to preserve what is associated with their activities. They recognize the importance of the organization and its related aspects, which leads to a greater commitment to sustainable tourism. Therefore, these managers exhibit more efforts towards sustainable tourism while preserving the environment.

The findings of the fourth hypothesis, "effect of vitality on the attitude towards tourism with the mediating role of organizational intelligence in senior managers of tourism agencies," showed that organizational intelligence has a mediating role in driving positive and significant changes in attitudes towards sustainable tourism. In other words, an increase in vitality leads to a higher positive attitude towards sustainable tourism, mediated by organizational intelligence. Although specific studies focusing on the relationships proposed in this hypothesis were not found, the findings of Altunel and Yalcin (2022), Ku et al. (2022), Abdoli et al. (2021), and Hussain et al. (2022) support the impact of vitality, happiness, and organizational intelligence on sustainable tourism. These findings suggest that when employees and managers in travel agencies possess vitality, enthusiasm, and happiness, and value their work environment and organization,

they are more likely to demonstrate greater efforts towards sustainable tourism, including environmental preservation.

The investigation of hypothesis number five, which is "The impact of well-being on attitudes towards sustainable tourism with the mediating role of environmental awareness," shown that attitudes toward sustainable tourism are positively and significantly impacted by individual's level of well-being, with environmental awareness playing a mediating role. In the review of relevant literature, no exact match to this research was found. However, Khan et al. (2022) demonstrated that attitudes toward sustainable tourism are significantly influenced by knowledge of sustainable tourism, which is consistent with the study's findings. Additionally, Aman et al. (2021) indicated that tourists' awareness of environmental has a great impact on their pro-environmental behavior.

This hypothesis can be explained by stating that when there is a joyful and upbeat work environment, people feel happy and satisfied in their work environment, and there is a high level of environmental awareness, then workers develop a sense of responsibility towards environmental conservation. In such circumstances, it becomes evident that there is an increased inclination towards sustainable tourism among employees and managers.

4.7 Recommendations for tourism planners

Based on the research findings, some recommendations have been provided for tourism industry planners:

- Managers of travel agencies should strive to create a lively and energetic environment in the organization, where both work relationships and friendships are fostered, and employees are supported in their work.
- Creating enthusiasm within the organization encourages employees to value their jobs and work environment. Therefore, it is necessary to pay attention to the enthusiasm and vitality of employees and managers in the workplace.
- Higher organizational intelligence among employees leads to a better
 understanding of the importance of their work, which in turn fosters employee
 appreciation for their jobs and work environment. Therefore, managers should
 focus on factors that influence organizational intelligence, such as methods to
 create enthusiasm and liveliness tailored to the agency's environment.
- Clearly define and separate tasks in the work environment to ensure that employees have a proper understanding of their responsibilities and can perform

their activities according to a well-defined plan, while also encouraging their initiative and creativity within their job.

- Managers should support employees in the workplace and encourage collaboration. Recognize and reward their achievements, distributing both monetary and non-monetary rewards among all employees when the organization succeeds, so that successful workers believe they contribute to the success of the company..
- Preserving the work environment can have a big impact on the success of travel agencies because it is intimately tied to the tourism and environmental context.
 Organizational intelligence promotes a better understanding of this reality by managers and employees, so it is essential to pay attention to this important aspect.
- Provide employees with necessary education and awareness regarding environmental pollution and its effects on the environment. Describe how tourism affects pollution and environmental preservation.
- Encourage employees and managers to increase their knowledge and awareness of the environmental effects of tourism activities and make intensified efforts to protect the environment.

5 Conclusion

The main purpose of the study was to investigate the effect of vitality on attitudes towards sustainable tourism in senior managers of travel agencies. The design of study was descriptive, but since questionnaires were used to gather the data, it also qualifies as a quantitative, survey research design. The senior managers of tour and travel agencies worldwide were the population of the study, which was an unlimited population, and using the Cochran's formula, the sample size was estimated to be 384 people. The data and information was collected using the standard, including the Vitality Scale (Ryan & Frederick, 1997), Attitudes towards Sustainable Tourism Scale (Chris et al., 2006), Environmental Awareness Scale (Junquera et al., 2012), and Organizational Intelligence Scale (Albrecht, 2003). Two statistical programs, PLS3 and SPSS-22, were utilized to analyze the data, and descriptive and inferential statistics were applied to the research findings at two different levels of analysis. The research findings showed that vitality had a major impact on attitudes towards sustainable tourism and organizational intelligence, and environmental awareness had a significant effect on attitudes towards sustainable tourism. The study found that if the managers and employees of travel companies have the necessary vitality and experience satisfaction and enthusiasm in their work environment, they develop a stronger sense of belonging and place greater importance on their work environment and job success. Additionally, the presence of environmental awareness within the organization leads to improved environmental attitudes and attitudes towards sustainable tourism.

Limitations

One of the limitations that this study faced while being conducted was that the questionnaires was accompanied by non-cooperation from some individuals. Despite providing a complete explanation of the research objectives to these individuals, there were still some difficulties and resistance present.

Recommendations for future study

There are some directions and prospects for further study which are outlined as below:

First, it is advisable to investigate how demographic variables like tenure and age may moderate the relationships between the variables of interest. This research may lead to a deeper comprehension of how these factors impact the dynamics within the context of sustainable tourism in travel agencies.

Second, it is recommended to carry out qualitative research to learn more about the elements that propel advancements in sustainable tourism viewpoints within travel agencies. The nuances of sustainable practices and how sustainability is viewed in the travel industry may be clarified by this qualitative investigation.

Lastly, it would be beneficial to investigate how environmental awareness affects environmentally conscious travel in travel agencies, especially from the perspective of travelers' environmental attachment. Examination of travelers' attachment to the environment affects how engaged they are with sustainable tourism practices can provide insights into the motivations behind environmentally friendly travel choices.

Reference List

Abdoli, M., Aminbeidokhti, A., & Jafari, S. (2021). The Relationship Between Cultural Intelligence and the Perceived Value of Sustainable Tourism, Case Study: City of Yazd. Urban Tourism, 8(3), 121-135. doi: 10.22059/jut.2021.293532.759

Adam, I., Taale, F., & Adongo, C. A. (2018). Tourists' Values and Empathic Attitude Toward Sustainable Development in Tourism. Ecological Economics, 150, 251-263.

Administrations of Protected Areas and Sustainable Tourism (Un)Development in Slovakia. *Sustainability*.

Ahmad, Z., Hassan, N. M., Khattak, M. N., Moustafa, M. A., & Fakhri, M. (2021). Impact of Tourist's Environmental Awareness on Pro-Environmental Behavior with the Mediating Effect of Tourist's Environmental Concern and Moderating Effect of Tourist's Environmental Attachment. Sustainability, 13, 12998. https://doi.org/10.3390/su132312998

Akgun, A. E., Byrne, J., & Keskin, H. (2007). Organizational Intelligence: A Structuration View.

Almeida-García, F., Pelaez-Fernandez, M. A., Balbuena-Vazquez, A., & Cortés-Macias, R. (2016). Residents' Perceptions of Tourism Development in Benalmádena (Spain). Tourism Management, 54, 259-274.

Altunel, M. C., & Yalçın, M. (2022). Examining the Relationship between Subjective Vitality as a Personality Trait, Experience Quality, and Environmental Stewardship of Tourists Visiting Atatürk Arboretum. Advances in Hospitality and Tourism Research (AHTR), 10(2), 277-305. DOI: 10.30519/ahtr.941911

Alvani, N., & Savari, M. (2022). A Comparison of Sustainable Tourism Indicators in Rural Areas of Khuzestan and Abadan Counties Using SWOT Matrix. *Geography and Human Relations*, *5*(1), 26-42.

Aman, S., Hassan, N. M., Khattak, M. N., Moustafa, M. A., Fakhri, M., & Ahmad, Z. (2021). Impact of Tourist's Environmental Awareness on Pro-Environmental Behavior with the Mediating Effect of Tourist's Environmental Concern and Moderating Effect of Tourist's Environmental Attachment. *Sustainability*, *13*(12), 12998. https://doi.org/10.3390/su132312998

Aminrad, Z., Azizi, M., Wahab, M., Huron, R., & Nawawi, M. (2010). Environmental Awareness and Attitude among Iranian Students in Malaysian Universities. *EnvironmentAsia*, *3*, 1-10. https://doi.org/10.14456/ea.2010.34.

Arbazadeh, M. (2017). The relationship between basic psychological needs and mental well-being in the elderly. Elderly [In Persian].

Argyle, M., Martin, M., & Crossland, J. (1989). Happiness as a Function of Personality. In J. P. Forgas & J. M. Innes (Eds.), Recent Advances in Social Psychology: An International Perspective (pp. 189-203). North Holland: Elsevier Science Publishers.

Argyle, M., Martin, M., & Crossland, J. (1989). Happiness as a Function of Personality and Social Encounters. In J. P. Forgas & J. M. Innes (Eds.), Recent Advances in Social Psychology: An International Perspective* (pp. 189-247). North-Holland: Elsevier Science Publishers B.V.

Arntzen, J., Setlhogile, T., & Barnes, J. (2007). Rural Livelihoods, Poverty Reduction, and Food Security in Southern Africa: Is CBNRM the Answer? Washington, DC: International Resources Group.

Aslan, A., Altinoz, B., & Özsolak, B. (2021). The Nexus between Economic Growth, Tourism Development, Energy Consumption, and CO2 Emissions in Mediterranean Countries. Environmental Science and Pollution Research, 28(3), 3243-3252.

Ayşe, B., & Meral, E. (2022). The mediating role of organizational intelligence in the relationship between quantum leadership and innovative behavior. *Frontiers in Psychology*, *13*. https://www.frontiersin.org/articles/10.3389/fpsyg.2022.1051028

Azam, M., Alam, M. M., & Hafeez, M. H. (2018). Effect of Tourism on Environmental Pollution: Further Evidence from Malaysia, Singapore, and Thailand. *Journal of Cleaner Production*, 190, 330-338.

Badulescu, D., & Badulescu, A. (2014). Medical tourism: between entrepreneurship opportunities and bioethics boundaries: narrative review article. *Iranian journal of public health*, 43 (4), 406.

Bahrami, M. A., Kiani, M. M., Montazeralfaraj, R., Zadeh, H. F., & Zadeh, M. M. (2016). The Mediating Role of Organizational Learning in the Relationship of Organizational Intelligence and Organizational Agility. *Osong Public Health Research Perspectives, 7*(3), 190-196. DOI: 10.1016/j.phrp.2016.04.007. PMID: 27413650; PMCID: PMC4927667.

Baloch, Qadar Bakhsh; Shah, Syed Naseeb; Iqbal, Nadeem; Sheeraz, Muhammad, Muhammad Asadullah (2022). Impact of tourism development upon environmental sustainability: a suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research*, 1 (2), 22-55.

Bazrafkan, H. (2012). Spiritual Intelligence and big five personality traits. The Congress of the National Association of Clinical Psychology [In Persian].

Behroozeh, S., Hayati, D., & Karami. E. (2022). Determining and validating criteria to measure energy consumption sustainability in agricultural greenhouses. *Technological Forecasting and Social Change*.

Bostic, J. H. (2002). Constructive thinking, mental health, and physical health: An explanatory model of correlated constructs in health psychology (Doctoral dissertation). *Saint Louis University*.

Bostic, T. J., & Ptacek, J. T. (2001). Personality factors and the short-term variability in subjective well-being. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 2(4), 355-373. https://doi.org/10.1023/A:1013929030931

Boukas, N.; Ziakas, V. (2016). Tourism Policy and Residents' Well-Being in Cyprus: Opportunities and Challenges for Developing an inside-out Destination Management Approach. *J. Destin. Mark. Manag.*, *5*, 44-54.

Buffa, F. (2015). Young Tourists and Sustainability: Profiles, Attitudes, and Implications for Destination Strategies. *Sustainability*, *7*, 14042-14062. https://doi.org/10.3390/su71014042.

Burns, G.L., MacBeth, J., Moore, S. (2011). Should dingoes die? Principles for engaging eccentric ethics in wildlife tourism management. Journal of Ecotourism, 10(3), 179-196.

Butler, R.W. (1999). Sustainable Tourism: A State-of-the-Art Review. *Tour. Geogr.*, *1*, 7-25.

Cabezas, A.L. (2008). Tropical Blues: Tourism and Social Exclusion in the Dominican Republic. *Lat. Am. Perspect.*, 35, 21-36.

Cardinali, P., Varani, N., & Migliorini, L. (2020). Sustainable Tourism Attitude and Preference in Italian Adults: Value Orientation and Psychological Need Satisfaction. *Sustainability*.

Cavagnaro, E., & Staffieri, S. (2015). A study of students' travelers' values and needs in order to establish future patterns and insights. *Journal of Tourism Futures*. ISSN: 2055-5911.

Chamarro, A., Cobo-Benita, J., & Herrero Amo, M. D. (2021). Towards sustainable tourism development in a mature destination: measuring multi-group invariance between residents and visitors' attitudes with high use of accommodation-sharing platforms. *Journal of Sustainable Tourism*.

Chen, J.S.; Johnson, C.; Gherissi-Labben, T. (2013). Cross-Cultural Examination of Decision Elements: Youth Tourism in Switzerland. *Anatolia*, 24, 162-172.

Chen, X., He, X., & Wang, S. (2022). Simulated Validation and Prediction of Land Use under Multiple Scenarios in Daxing District, Beijing, China, Based on GeoSOS-FLUS Model. *Sustainability, 14*, 11428. https://doi.org/10.3390/su141811428

Cheung, G.W., Cooper-Thomas, H.D., Lau, R.S., et al. (2023). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*. https://doi.org/10.1007/s10490-023-09871-y

Choi, Hwan-Suk Chris and Sirakaya, Ercan (2005). Measuring Residents' Attitude toward Sustainable Tourism: Development of Sustainable Tourism Attitude Scale. *SEGA JOURNAL*, *43*(4), 1-20.

Cohen, S., & Herbert, T. B. (1996). Health psychology: Psychological factors and physical disease from the perspective of human psychoneuroimmunology. *Annual Review of Psychology*, 47, 113-142. https://doi.org/10.1146/annurev.psych.47.1.113. PMID: 8624135.

Das, M., Chatterjee, B. (2015). Ecotourism: a panacea or a predicament? *Tourism Management Perspectives*, 14, 3-16. http://dx.doi.org/j.tmp.2015.01.002

Deci, E. L., & Ryan, R. M. (2014). Autonomy and need satisfaction in close relationships: Relationships motivation theory. In N. Weinstein (Ed.), *Human motivation and interpersonal relationships: Theory, research, and applications* (pp. 53–73). Springer Science + Business Media.

Deci, E.L., Rayan, R.M., Gagne, M., Leone, D.R., Usunov, J., Kornazheva, B.P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and Psychology Bulletin*, 27, 930-942.

Deniz, D. (2016). Sustainable Thinking and Environmental Awareness through Design Education. *Procedia Environmental Sciences*, *34*, 70-79. https://doi.org/10.1016/j.proenv.2016.04.008.

Diéguez-Castrillón, M. I., Gueimonde-Canto, A., & Rodríguez-López, N. (2022). Sustainability indicators for tourism destinations: Bibliometric analysis and proposed research agenda. *Environment, Development and Sustainability*, 24, 11548–11575. https://doi.org/10.1007/s10668-021-01951-7.

Dresner, S. (2005). Foundations of Sustainability.

Elhian, A. (1387). A Comparative Study of Organizational Intelligence of Staff in the Library of Astan Quds Razavi and Ferdowsi University Library in Mashhad. I*slamic Azad University, Tehran Unit.* [In Persian].

Entrepreneurship Education and Research in the Middle East and North Africa (MENA). *Springer Science and Business Media LLC*.

Erçetin, Ş. Ş., Potas, N., Kisa, N., & Açikalin, S. N. (2007). To Be on the Edge of Chaos with Organizational Intelligence and Health.

Fallon, L.D., Kriwoken, L.K. (2003). Community Involvement in Tourism Infrastructure—The Case of the Strahan Visitor Centre, Tasmania. *Tourism Management*, 24, 289-308.

Feisali, M., & Niknami, M. (2021). Towards sustainable rural employment in agricultural cooperatives: Evidence from Iran's desert area. *Journal of the Saudi Society of Agricultural Sciences*.

Font, X., Garay, L., Jones, S. (2016). A social cognitive theory of sustainability empathy. *Annals of Tourism Research*, 58, 65-80.

Freedman, J. (1978). *Happy people: What happiness is, who has it, and why.* New York: Harcourt Brace Jovanovish.

Frittief. C. (2015). "Hidden bonds: Combining the biological and social spheres of life in sustainability". Translation by Mohammad Hariri Akbar, Tehran, [In Persian].

Ghadampour, A., & Biranvand, K. (2017). The Effect of Meaning Therapy on Happiness and Academic Resilience of Students. *Journal of Cognitive Sciences News*, 19(4), 43-56.

Gheibizadeh, M., Javanmardifard, S., Azar, M., Fazeli, M., & Bigdeli Shamloo, M. B. (2022). Happiness, Hope, and Adherence to Treatment Regimen Among Iranian Older Adults with Chronic Diseases During the COVID-19 Pandemic. *Jundishapur Journal of Chronic Disease Care*.

Glynn, M. A. (1996). Innovative Genius: A Framework for Relating Individual and Organizational Intelligences to Innovation. *The Academy of Management Review*, 21(4), 1081-1111.

Gnoth, J., & Zins, A. H. (2013). Developing a tourism cultural contact scale. *Journal of Business Research*, 66(6), 738-744.

Gray, J. (2018). Life, Death, or Zombie? The Vitality of International Organizations. *International Studies Quarterly*, 62(1), 1-13. https://doi.org/10.1093/isq/sqx086

Guo, A.; Wang, S.; Li, H.; Guo, Y. (2020). Influence Mechanism of Residents' Perception of Tourism Impacts on Supporting Tourism Development: Intermediary Role of Community Satisfaction and Community Identity. *Tourism Tribune*, *35*, 96–108.

Han, H., Yu, J., & Kim, W. (2018). Youth travelers and waste reduction behaviors while traveling to tourist destinations. *Journal of Travel & Tourism Marketing*, *35* (9), 1119-1131. https://doi.org/10.1080/10548408.2018.1435335.

Han, S., Ramkissoon, H., You, E., & Kim, M. J. (2023). Support of residents for sustainable tourism development in nature-based destinations: Applying theories of social exchange and bottom-up spillover. *Journal of Outdoor Recreation and Tourism*.

Hasaninasab, S., Jalili, S., & Mirani, K. (2020). Evaluation Effects of Personality on the Young people Traffic Offense and Accident. *Iranian Journal of Science and Technology, Transactions of Civil Engineering*.

Hassan, A., Kennell, J., Chaperon, S. (2020). Rhetoric and reality in Bangladesh: elite stakeholder perceptions of the implementation of tourism policy. *Tourism Recreation Research*, 45(3), 307-322.

Higham, J. (1999). Commentary-Sport as an Avenue of Tourism Development: An Analysis of the Positive and Negative Impacts of Sport Tourism. *Current Issues in Tourism*, 2, 82-90.

Hossain, M.I., Japutra, A., Akter, N. (2022). Emotional intelligence: how it influences tourists' environmentally responsible behavior. *Tourism Recreation Research*, 24(7), 1-15.

Howson, C. (2008). Successful Business Intelligence: Secrets to Making BI a Killer App (1st ed.).

Hsieh, C.-M., Park, S.H., Huh, C. (2016). A Comparison Model of Residents' and Tourists' Attitudes toward Sustainable Tourism Development: A Case of Penghu Island in Taiwan. *Travel and Tourism Research Association: Advancing Tourism Research Globally*.

Hsiao, H. C., & Chang, J. C. (2011). The role of organizational learning in transformational leadership and organizational innovation. Asia Pacific Education Review, 12, 621–631. https://doi.org/10.1007/s12564-011-9165-x

Hsu, C.-Y., Chen, M.-Y., Nyaupane, G. P., & Lin, S.-H. (2020). Measuring sustainable tourism attitude scale (SUS-TAS) in an Eastern island context. *Tourism Management Perspectives*, *33*, 100617. https://doi.org/10.1016/j.tmp.201

Iftikhar, H., Pinglu, C., Ullah, S., & Ullah, A. (2022). Impact of tourism on sustainable development in BRI countries: The moderating role of institutional quality. *PLOS ONE, 4*(e0263745). https://doi.org/10.1371/journal.pone.0263745

Izadpanah, S. (2023). The Mediating Role of Academic Passion in Determining the Relationship Between Academic Self-Regulation and Goal Orientation With Academic Burnout Among English Foreign Language (EFL) Learners. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.933334

Karoubi, M., & Bagheri, F. (2018). Deficiency of Communication Media in Creating Sustainable Attitudes in the Tourism Industry. *Tourism and Leisure Studies*, 5(10), 53-77.

Karytsas, Spyridon; Vardopoulos, Ioannis & Theodoropoulou, Eleni; (2019). Factors affecting residents' attitude toward sustainable tourism development, *Tourismos 14*(1), 1-40.

Khan, I. U., Khan, S. U., & Khan, S. (2022). Residents' satisfaction with sustainable tourism: the moderating role of environmental awareness. *Tourism Critiques: Practice and Theory*.

Khan, I.U., Khan, S.U. and Khan, S. (2022), "Residents' satisfaction with sustainable tourism: the moderating role of environmental awareness", *Tourism Critiques, Vol. 3 No. 1*, pp. 72-87. https://doi.org/10.1108/TRC-04-2022-0007

Khodapour, E., & Beyranvand, K. (2017). The effect of meaning therapy on the happiness and academic success of students. *Journal of New Cognitive Sciences* [In Persian].

Khodayi, F., & Beyranvand, K. (2017). The effect of meaning therapy on the happiness and academic success of students. Journal of New Cognitive Sciences [In Persian].

Khorasani, M, (2012), Explaining the Sustainability of Suburban Villages with Quality of Life Approach Case Studies of Varamin City, Supervisor Mohammad Reza Razvani, Associate Professor Seyed Hassan Motiei Langroudi and MojTab.a Rafieian, Tehran University. [in Persian].

Ko, E.E.; Cho, M. (2022). Exploring Determinants of Tourists' Ethical Behavior Intention for Sustainable Tourism: The Role of Both Pursuit of Happiness and Normative Goal Framing. *Sustainability*, *14*, 9384. https://doi.org/10.3390/su14159384

Kortenkamp, K.V., Moore, C.F. (2001). Ecocentrism and anthropocentrism: moral reasoning about ecological commons dilemmas. *Journal of Environmental Psychology*, *21*(*3*), 261–272.

Kroobi, M., & Bagheri, F. (2018). The role of communication media in promoting sustainability in the tourism industry. *Tourism and Leisure* [In Persian].

Kusumaningtyas, M., Zaki, I., Herianingrum, S., & Ryandono, M. N. H. (2022). Preparing Future's Community Empowerment: A Quantitative Study of The Correlation Between Empowerment And Human Resources In Ranu Pani And Sanan Tourism Village. Perisai: Islamic Banking and Finance Journal.

Lai, M. L. (2012). Tracking language attitudes in postcolonial Hong Kong: An interplay of localization, mainlandization, and internationalization.

Larice, M. (2005). Great Neighborhoods: The Livability and morphology of Highdensity neighborhoods in Urban North America. Doctor of Philosophy in City and Regional Planning, University of California, Berkeley.

Lee, C.C., Chang, C.P. (2008). Tourism development and economic growth: a closer look at panels. *Journal of Tourism Management*, 29(1), 180-192.

Lee, C. C., Chen, M. P., & Wu, W. (2022). The criticality of tourism development, economic complexity, and country security on ecological footprint. *Environmental Science and Pollution Research International, 29*(24), 37004-37040. DOI: 10.1007/s11356-022-18499-2. PMID: 35034302; PMCID: PMC8761056.

Lee, T.H., Jan, F.-H. (2019). Can Community-Based Tourism Contribute to Sustainable Development? Evidence from Residents' Perceptions of the Sustainability. *Tourism Management*, 70, 368-380.

Lee, T.H., Jan, F.H., Liu, J.T. (2021). Developing an Indicator Framework for Assessing Sustainable Tourism: Evidence from a Taiwan Ecological Resort. **Ecological Indicators**, 125, 107596.

Liebowitz, J. (2000). Building Organizational Intelligence: A Knowledge Management Primer.

Liu, Z. (2003). Sustainable Tourism Development: A Critique. *Journal of Sustainable Tourism*, 11, 459-475.

Long, P.T., Perdue, R.R., Allen, L. (1990). Rural Resident Tourism Perceptions and Attitudes by Community Level of Tourism. *Journal of Travel Research*, 28, 3-9.

Lozano-Oyola, M., Blancas, F.J., González, M., Caballero, R. (2012). Sustainable Tourism Indicators as Planning Tools in Cultural Destinations. *Ecological Indicators*, *18*, 659-675.

Lu, Y., & Ahmad, Y. (2023). Heritage Protection Perspective of Sustainable Development of Traditional Villages in Guangxi, China. Sustainability.

Lung, C. N., Suntikul, W., Agyeiwaah, E., & Tolkach, D. (2017). Backpackers in Hong Kong – motivations, preferences, and contribution to sustainable tourism. *Journal of Travel & Tourism Marketing*, 34(8), 1058-1070.

Lynch, R. L. (2018). Strategic Management. Pearson Education Limited. Harlow, United Kingdom.

Mahjoub, M., Atashsokhan, S., Khalilzadeh, M., Aghajanloo, A., & Zohrehvandi, S. (2018). Linking "Project Success" and "Strategic Talent Management": Satisfaction/motivation and organizational commitment as mediators. Maloney, M. M., Shah, P. P., Zellmer-Bruhn, M., & Jones, S. L. (2019). The lasting benefits of teams: Tie vitality after teams disband. *Organization Science*, 30*(2), 260-279. https://doi.org/10.1287/orsc.2018.1254

Matsuda, T. (1993). Organizational intelligence: Theory of collectively intelligent behaviors and engineering of effective information systems in the complex organizations. In *Proceedings of IEEE Systems Man and Cybernetics Conference - SMC* (pp. 664-669, vol. 1). Le Touquet, France. https://doi.org/10.1109/ICSMC.1993.384820.

Mazhenova, Shinar; Choi, Jeong-gil; Chung, Jellna (2016): International tourists' awareness and attitude about environmental responsibility and sustainable practices, *Global Business & Finance Review (GBFR)*, 21(2), 132-146.

Mehrkish, N. I., & Grant, S. B. (2021). The role of senior managers' positive self-image in supporting MIS implementation. *VINE Journal of Information and Knowledge Management Systems*.

Mei, N., Wai, C., & Ahamad, R. (2016). Environmental Awareness and Behaviour Index for Malaysia. *Procedia - Social and Behavioral Sciences*, 222. doi: 10.1016/j.sbspro.2016.05.223

Mihalic, T., Mohamadi, S., Abbasi, A., & Dávid, L. D. (2021). Mapping a Sustainable and Responsible Tourism Paradigm: A Bibliometric and Citation Network Analysis. *Sustainability*, *13*, 853. https://doi.org/10.3390/su13020853.

Mikayilov JI, Mukhtarov S, Mammadov J, Azizov M (2019) Re-evaluating the environmental impacts of tourism: does EKC exist? *Environ Sci Pollut Res*, 26(19), 19389–19402.

Milanović Pešić, A., Jojić Glavonjić, T., Denda, S., & Jakovljević, D. (2023). Sustainable Tourism Development and Ramsar Sites in Serbia: Exploring Residents' Attitudes and Water Quality Assessment in the Vlasina Protected Area. *Sustainability, 15*, 15391. https://doi.org/10.3390/su152115391.

Moghavvemi, S., Woosnam, K. M., Paramanathan, T., Musa, G., & Hamzah, A. (2017). The effect of residents' personality, emotional solidarity, and community commitment on support for tourism development. *Tourism Management*, 63, 242-254.

Mohammadian, M., & Bakhshandeh, G. (2014). Exploring the Effective Factors on Consumers' Attitude and Green Purchase Intention. [In Persian]. Retrieved from https://civilica.com/doc/664999

Mohebbi, A., Aghaei, V., & Ghasemi, M. (2021). Analysis and Spatial Classification at the Urban Regional Level for Achieving Sustainable Tourism: A Case Study of Ardabil City. *Journal of Urban Planning Geography Research*, 9(4), 1125-1148.

Moradi, S., Faghiharam, B., & Ghasempour, K. (2018). Relationship Between Group Learning and Interpersonal Skills With Emphasis on the Role of Mediating Emotional Intelligence Among High School Students. *SAGE Open*, 8(2). https://doi.org/10.1177/2158244018782734

Muhammad I. Hossain, Arnold Japutra & Nasrin Akter (2022). Emotional intelligence: how it influences tourists' environmentally responsible behavior. *Tourism Recreation Research*, 24, 1-25.

Natving GK, Alberksten G, Qvarnstrom U. (2003). Association between psychosocial factors and happiness among school adolescents. *International Journal of Nursing Practice*, 9 (3), 166-175.

Nasr, E., Emeagwali, O. L., Aljuhmani, H. Y., & Al-Geitany, S. (2022). Destination Social Responsibility and Residents' Environmentally Responsible Behavior: Assessing the Mediating Role of Community Attachment and Involvement. *Sustainability, 14*, 14153. https://doi.org/10.3390/su142114153.

Nickerson, N.P., Jorgenson, J., Boley, B.B. (2016). Are sustainable tourists a higher spending market? *Tourism Management*, *54*, 170–177.

Nix, G. A., Ryan, R. M., Manly, J. B., & Deci, E. L. (1999). Revitalization through self-regulation: The effects of autonomous and controlled motivation on happiness and vitality. *Journal of Experimental Social Psychology*, *35*(3), 266-284.

Nok, L.C.; Suntikul, W.; Agyeiwaah, E.; Tolkach, D. (2017). Backpackers in Hong Kong—Motivations, Preferences and Contribution to Sustainable Tourism. *Journal of Travel & Tourism Marketing*, *34*, 1058–1070.

Norozi Chegani, M. (2016). The Effects of Organizational Intelligence and Creativity on Technological Innovation: A Case Study of the Manufacturing Firms in Iran. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 5(7), 14.

Obradović, S., & Stojanović, V. (2022). Measuring residents' attitude toward sustainable tourism development: a case study of the Gradac River gorge, Valjevo (Serbia). *Tourism Recreation Research*, 47(5-6), 499-511. https://doi.org/10.1080/02508281.2020.1870073

Ooi, N., & Laing, J. H. (2010). Backpacker tourism: sustainable and purposeful? Investigating the overlap between backpacker tourism and volunteer tourism motivations. *Journal of Sustainable Tourism*, *18*(2), 191-206. https://doi.org/10.1080/09669580903395030.

Owoseni, J. S. (2020). Sexual Knowledge and Teenage Pregnancy among Female Hawkers in Ekiti State, Nigeria. *Research Square Platform LLC*.

Perogordo Madrid, Daniel (2007). The Silesia Megapolis, European Spatial Planning.

Potas, N., ERÇETİN, Ş. Ş., & Kocak, S. (2010). Multi-dimensional organizational intelligence measurements for determining the institutional and managerial capacity of girls' technical education institutions (Diyarbakir, Sanliurfa, and Konya/Turkey). *African Journal of Business Management*, 4(8), 1644-1651.

Pourhossein, M., Baker, B. J., Dousti, M., Behnam, M., & Tabesh, S. (2023). Embarking on the trail of sustainable harmony: Exploring the nexus of visitor environmental engagement, awareness, and destination social responsibility in natural parks. *Journal of Destination Marketing & Management*.

Pulido-Fernández, J.I., Andrades-Caldito, L., Sánchez-Rivero, M. (2015). Is sustainable tourism an obstacle to the economic performance of the tourism industry? Evidence from an international empirical study. *Journal of Sustainable Tourism*, 23(1), 47–64.

Rasoolimanesh, S.M.; Ringle, C.M.; Jaafar, M.; Ramayah, T. (2017). Urban vs. Rural Destinations: Residents' Perceptions, Community Participation and Support for Tourism Development. *Tourism Management*, 60, 147–158.

Ravikumar, Anitha, Sheikha Al Subhi, and Krishna Murthy Meesala. (2022). Community Perception and Attitude towards Sustainable Tourism and Environmental Protection Measures: An Exploratory Study in Muscat, Oman. *Economies*, 10, 29.

Rogers, C. (1980). A Way of Being. Boston: Houghton Mifflin.

Ryan, R. M., & Frederick, C. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65(3), 529-565.

Salehi, S., & Amamgholi, L. (2012). Empirical study of the relationship between knowledge and environmental behaviors (Study of urban and rural areas of Sanandaj city). *Journal of Social Problems of Iran*, *3*(1), 121-147 [In Persian].

Salehi, S., soleimani, K., & pazouke, Z. (2016). An Analysis of Responsible Environmental Attitude and Behavior of Students (A Case study: Students in Mazandaran Province Universities). *Environmental Researches*, 6(11), 562-576.

Sanfey, D. (2023). 'Enough is Enough': A Mixed Methods Study on the Key Factors Driving UK NHS Nurses' Decision to Strike. *Research Square Platform LLC*.

Santana-Jimenez, Y., Hernandez, J.M. (2011). Estimating the effect of overcrowding on tourist attraction: The case of Canary Islands. *Tourism Management*, 32(2), 415–425.

Šaparnienė, D., Mejerė, O., Raišutienė, J., Juknevičienė, V., & Rupulevičienė, R. (2022). Expression of Behavior and Attitudes toward Sustainable Tourism in the Youth Population: A Search for Statistical Types. *Sustainability*.

Šaparniene, D.; Mejere, O.; Raišutiene, J.; Juknevicien e, V., Rupuleviciene, R. (2022). Expression of Behavior and Attitudes toward Sustainable Tourism in the Youth Population: A Search for Statistical Types. *Sustainability*, *14*, 473. https://doi.org/10.3390/su14010473

Sariçam, H. (2015). Life satisfaction: Testing a structural equation model based on authenticity and subjective happiness. *Polish Psychological Bulletin*, *46*(2), 278-284. https://doi.org/10.1515/ppb-2015-0034

Schönherr, S., & Pikkemaat, B. (2023). Young peoples' environmentally sustainable tourism attitude and responsible behavioral intention.

Selcuk, Onur; Karakas, Hatice; Cizel, Beykan; Fırat Ciftci, Sükrü; & Oksuz, Fulya Coskun; (2021). Comparative Analysis of Residents' Attitudes Toward Sustainable Tourism Development Using a Multi-Criteria Decision-Making Technique. *Iranian Journal of Management Studies (IJMS)*, 14(3), 585-607.

Shaheen K, Zaman K, Batool R, Khurshid MA, Aamir A, Shoukry AM, Gani S (2019). Dynamic linkages between tourism, energy, environment, and economic growth:

evidence from top 10 tourism-induced countries. *Environmental Science and Pollution Research*, 26(30), 31273–31283.

Shams, A., & Hooshmandan Moghaddam Fard, Z. (2015). Factors Affecting Zanjan Elementary Teachers' Attitude toward Integrating Agriculture and Environment Education in Students' Curriculum [In Persian].

Sharma, B., & Gursoy, D. (2014). An Examination of Changes in Residents' Perceptions of Tourism Impacts Over Time: The Impact of Residents' Sociodemographic Characteristics. *Asia Pacific Journal of Tourism Research*.

Sheibani Nia, K., Abdullahi, S., & Mohammadzadeh, M. (2021). An overview of tourism and its effects: A step towards sustainable development. *Human and Environment* [In Persian].

Sher, K.L., Bagul, A.H.B.P., Din, S.A.M. (2015). The influence of community attachment and community involvement towards residents' support for sustainable tourism development by mediating perceived benefits and perceived costs. *American-Eurasian Journal of Agricultural & Environmental Sciences*, 15, 133–138.

Shibaninia, K., Abdullahi, S., & Mohammadzadeh, M. (2021). A comparison of sustainable tourism indicators in rural areas of Khormoj and Abadan counties using the SWOT matrix. *Geography and Human Relations*[In Persian].

Simo Kengne BD (2022). Tourism growth and environmental sustainability: trade-off or convergence? *Environment, Development and Sustainability, 24*(6), 8115–8144.

Song, H.; Zhu, C.; Fong, L.H.N. (2021). Exploring Residents' Perceptions and Attitudes towards Sustainable Tourism Development in Traditional Villages: The Lens of Stakeholder Theory. *Sustainability*, *13*, 13032. https://doi.org/10.3390/su132313032

Štrba, Ľ., Kolačkovská, J., Kršák, B., Sidor, C., & Lukáč, M. (2022). Perception of the Impacts of Tourism by the Administrations of Protected Areas and Sustainable Tourism (Un)Development in Slovakia. *Sustainability*, *14*, 6696. https://doi.org/10.3390/su14116696.

Tanguay, G. A., Rajaonson, J., & Therrien, M. C. (2013). Sustainable Tourism Indicators: Selection Criteria for Policy Implementation and Scientific Recognition. *Journal of Sustainable Tourism*, 21, 862–879.

Teye, V., Sirakaya-Turk, E., & Sönmez, S. (2002). Residents' attitudes toward tourism development. *Annals of Tourism Research*, 29, 668-688. https://doi.org/10.1016/S0160-7383(01)00074-3.

Timmer, V., & Seymoar, N. K. (2005). Vancouver Working Group Discussion Paper, Vancouver.

Ukaegbu, M. O., & Carr, N. (2020). An analysis of hope as a contributor to local people's perspectives of tourism development. *Anatolia*, *31*(3), 349-359. https://doi.org/10.1080/13032917.2020.1719524.

Ukaegbu, M. O., Carr, N., & Okpoko, P. U. (2020). Local People's Perceptions of the Potential Implications of Cultural Revitalisation through Tourism in Benin, Nigeria. *Journal of Tourism and Cultural Change*, 18, 455–469.

UNEP (2021). New report reveals how infrastructure defines our climate. October 1. United Nations. (1986). World Commission on Environment and Development. Our Common Future; Oxford University Press: Oxford, UK, 1987.

Vasconcelos, F. F., Sátiro, R. M., Fávero, L. P. L., Bortoloto, G. T., et al. (2023). Analysis of Judiciary Expenditure and Productivity Using Machine Learning Techniques.

Vicente-Molina, M. A., Fernández-Sáinz, A., & Izagirre-Olaizola, J. (2013). Environmental knowledge and other variables affecting pro-environmental behaviour: comparison of university students from emerging and advanced countries. *Journal of Cleaner Production*, 61, 130-138. https://doi.org/10.1016/j.jclepro.2013.05.015.

Vikan, A., Camino, C., Biaggio, A., & Nordvik, H. (2007). Endorsement of the New Ecological Paradigm. *Environmental Behavior*, *39*, 217–228. Vukic, M., Kuzmanovic, M., & Kostic Stankovic, M. (2015). Understanding the Heterogeneity of Generation Y's Preferences for Traveling: A Conjoint Analysis Approach. *International Journal of Tourism Research*, 17, 482–491.

Wang, J., Xie, L., & Zhang, S. (2020). Residents' Perceptions and Participation in Dark Tourism on Natural Disaster Site—A Case Study of Jina Qiang Stockaded Village, China. *Tourism Tribune*, 2020, 1–18.

Wang, W.-C. (2019). The effect of early-life outdoor experiences on residents' attitudes towards sustainable tourism within an urban context. *Journal of Outdoor Recreation and Tourism*.

Wesley Schultz, P., & Zelezny, L. (1999). Values as Predictors of Environmental Attitudes: Evidence for Consistency across 14 Countries. *Journal of Environmental Psychology*, 19, 255–265.

Wood, A. M. (2012). How are Personality Judgments Made? A Cognitive Model of Reference Group Effects, Personality Scale Responses, and Behavioral Reactions: Relative Personality Judgments. *Journal of Personality*.

Xu, F., & Fox, D. (2014). Modelling attitudes to nature, tourism and sustainable development in national parks: A survey of visitors in China and the UK. *Tourism Management*, 45, 142-158. https://doi.org/10.1016/j.tourman.2014.03.005

Yang, J., Ryan, C., & Zhang, L. (2013). Social Conflict in Communities Impacted by Tourism. *Tourism Management*, *35*, 82–93.

Zarei, G., & Pachal, Z. M. (2019). Examining the effect of brand equity dimensions on domestic tourists' length of stay in Sareyn: the mediating role of brand equity. *Asia Pacific Journal of Tourism Research*.

Zargaran Khoozani, F., Shah Jafari, A., & Molaei, M. H. (2022). Using Q-methodology in identifying mental patterns: The experience of religious tourists. *Tourism Management Studies* [In Persian].

Zarrabadi, Z. S., & Abdollah, B. (2013). Evaluating the effective factors in the development of the tourism industry in the Chabahar Free Zone using network process analysis. *Journal of Iranian Architecture and Urbanism*[In Persian].

Zeyayi, M., Amin Baidokhti, A. A., & Ghorbani, F. (2013). Assessing the capacity of the local community for sustainable tourism development. *Tourism Management Studies* [In Persian].

Zhang N, Ren R, Zhang Q, Zhang T (2020). Air pollution and tourism development: an interplay. *Annals of Tourism Research*, 85, 103032.

Zhu, H., Liu, J., Wei, Z., Li, W., & Wang, L. (2017). Residents' Attitudes towards Sustainable Tourism Development in a Historical-Cultural Village: Influence of Perceived Impacts, Sense of Place, and Tourism Development Potential. *Sustainability*, *9*(1), 61.

Ziaie, M., Amin Bidokhti, A. A., & Ghorbani, F. (2013). Evaluating the local community's capacity for sustainable tourism development. *Tourism Management Studies*[In Persian].

Zohor, A., & Fekri, A. (2003). Barriers from the viewpoint of research faculty of Medical Sciences at Iran University. *Payesh Health Monitor*, 2, 113-120.

Zohor, A., & Fekri, A. (2004). University students' happiness at Faculty of Management and Medical Information Sciences, Iran University of Medical Sciences, Tehran, Iran. *Asrar, Journal of Sabzevar School of Medical Sciences, 1*(11), 54-47. [In Persian]

Appendices

Appendix 1 Tables

Table 19 Components of Sustainable Tourism Attitudes

Questionnaire	Component	Questions
	Cultural	1,6,13,19
Attitude Towards Sustainable	Environmental	2,4,7
Tourism		
	Economical	3,14,15,16,17,18,20
	Social	5,8,9,10,11,12

Source: Own Work

Table 20 Kaiser-Meyer-Olkin (KMO) Statistic and Bartlett's Test Results

Variables	KMO	Bartlett's	KMO	Significance level
	statistic	statistic	statistic	(Sig)
Vitality	0.91	1955.071	21	0.001
Attitude towards sustainable Tourism	0.894	6740.864	190	0.001
Organizational Intelligence	0.889	5647.657	91	0.001
Environmental awareness	0.812	1009.670	6	0.001

Source: Own Work

Table 21 Calculated Cronbach's Alpha Coefficients for Research Questionnaires

Factor	Cronbach's Alpha coefficient is 0.7 < (a)
Environmental awareness	0.893
Social Aspect	0.838
Economical Aspect	0.886
Environmental Aspect	0.704
Cultural Aspect	0.823
Vitality	0.919
Attitude towards sustainable Tourism	
	0.950
Organizational Intelligence	0.945

Table 22 Distribution of Respondents' Gender

Gender	Man	289	75.3
	Woman	95	24.7
	Total	384	100

Table 23 Distribution of Respondents by Age

Age Group	Number	Percentage
30 year and Under 30	76	19.8
31 to 40 years	158	41.1
41 to 50 years	111	28.9
Above 50 years	39	10.2
Total	384	100

Source: Own Work

Table 24 Distribution of Respondents' Experience

Years of experience	Number	Percentage
Less than 7 years	72	18.8
8 to 14 years	145	37.8
15 to 21 years	114	29.7
More than 21 years	53	13.8
Total	384	100.0

Table 25 The mean of vitality variable items

Items	Mean	standard deviation	Kurtosis	skewness	Min	Max
I have a sense of vitality and energy.	3.503	1.140	-0.394	1.140	3.503	5
I don't feel very energized.	3.349	1.146	-0.002	1.146	3.349	5
Sometimes I feel alive and vibrant, and I can't contain it.	3.693	1.032	-0.518	1.032	3.693	5
I have a spirit and energy.	3.242	1.309	-0.013	1.309	3.242	5
I am eagerly awaiting each new day.	3.029	1.271	0.092	1.271	3.029	5
I almost always feel awake and alert.	3.130	1.222	0.034	1.222	3.130	5
I feel energized.	3.297	1.163	-0.046	1.163	3.297	5
Vitality	3.320	0.976	0.012	0.976	3.320	

Table 26 Mean of Sustainable Tourism Attitude Items

Items	Mean	standard deviation	Kurtosis	skewness	Min	Max
Tourism development promotes diverse cultural activities.	3.417	1.107	-0.078	-1.125	1	5
Tourism development leads to increased environmental interventions due to road and attraction development.	3.599	1.163	-0.466	-0.878	1	5
Tourism development results in increased local government expenses for fire safety and road construction, leading to higher taxes.	4.021	1.098	-1.290	1.090	1	5
Tourism facility development leads to the depletion of natural resources.	3.232	1.352	-0.090	-1.265	1	5
Tourism development increases recreational facilities for residents.	2.990	1.495	-0.114	-1.489	1	5
Tourism development contributes to the preservation of traditional buildings.	3.943	1.182	-1.168	0.499	1	5
Tourism development contributes to the preservation of natural resources.	4.083	1.021	-1.248	1.168	1	5
Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities.	3.849	1.149	-0.793	-0.152	1	5

Tourism development leads to an increase in crime.	3.797	1.077	-0.711	-0.155	1	5
Due to tourism development, traffic will increase.	4.010	0.942	-0.812	0.338	1	5
Dislike (hatred) towards strangers will increase with tourism development.	3.503	1.245	-0.320	-1.066	1	5
Noise and pollution will increase due to tourism development.	3.805	1.225	-0.728	-0.591	1	5
Tourism development leads to the loss of indigenous culture.	3.286	1.258	0.016	-1.260	1	5
Local residents in tourist areas bear the costs and damages of tourism development.	3.380	1.181	-0.122	-0.971	1	5
Tourism creates job opportunities.	3.711	1.225	-0.581	-0.776	1	5
Tourism development encourages investment in the area.	3.466	1.213	-0.185	-1.028	1	5
Tourism development provides small job opportunities for local residents.	3.315	1.240	-0.236	-0.994	1	5
Tourism provides significant economic benefits.	3.513	1.154	-0.304	-0.959	1	5
Tourism development enhances the cultural pride of residents.	3.052	1.389	-0.005	-1.316	1	5
Tourism development increases the income of residents.	4.143	1.107	-0.960	-0.550	2	5
Attitude towards sustainable tourism	3.803	0.894	-0.560	-0.117	1.4	5.2

Table 27 Average items of organizational intelligence

Items	Mean	Standard deviation	Kurtosis	skewness	Min	Max
Tourism development promotes diverse cultural activities.	3.901	0.945	-1.367	1.865	1	5
Tourism development leads to increased environmental interventions due to road and attraction development.	3.563	1.028	-0.728	0.117	1	5
Tourism development results in increased local government expenses for fire safety	3.701	1.080	-0.970	0.496	1	5

Leading to higher taxes.	and road construction,				1		
Tourism							
development leads to the depletion of natural resources.							
Tourism development contributes to the preservation of traditional buildings.							
Tourism development increases recreational facilities for residents.	_	3.602	1.052	-1.027	0.466	1	5
Tourism development increases recreational facilities for residents.	_						
Increases recreational facilities for residents.							
facilities for residents. Tourism development contributes to the preservation of traditional buildings. Tourism development contributes to the preservation of natural resources. Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Noise and pollution will increase due to tourism development. Tourism development Leads to the loss of indigenous culture. Local residents in tourism development. Local residents in tourism development.	*	2.046	1.017	1.051	1.510		<u>~</u>
Tourism development contributes to the preservation of traditional buildings.		3.846	1.017	-1.351	1.513	1	5
contributes to the preservation of traditional buildings. Tourism development contributes to the preservation of natural resources. Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the construction of roads and public facilities. Tourism development traffic will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development.							
Due to tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development.	_						
traditional buildings. Tourism development contributes to the preservation of natural resources. Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourism development. Local residents in tourism development. 3.263 1.192 -0.464 -0.553 1 5 -0.464 -0.553 1 5 -0.464 -0.553 1 5 -0.464 -0.553 1 5 -0.464 -0.565 1 5 -0.404 -0.867 1 5 -0.524 1 5 -0.524 1 5 -0.524 1 5 -0.524		3.378	1.190	-0.576	-0.531	1	5
Tourism development contributes to the preservation of natural resources. Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development 1.275	_						
contributes to the preservation of natural resources. Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development 1							
Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Due to tourism development. Due to tourism development towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase with tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development. Dislike (hatred) towards strangers will increase due to tourism development Dislike (hatred) towards strangers will increase due to tourism development Dislike (hatred) towards strangers will increase due to tourism development Dislike (hatred) towards strangers will increase due to tourism development Dislike (hatred) towards strangers will increase due to tourism development Dislike (hatred) towards strangers will increase due to tourism development Dislike (hatred) towards strangers will increase due to tourism development Di	_						
resources. Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourism development. Local residents in tourism adevelopment. 3.263 1.192 -0.464 -0.553 1 5 1.311 0.062 -1.023 1 5 1.311 0.062 1 5 1.311 0.062 1 5 1.311 0.062 1 5 1.311 0.062 1 5 1.31		2.930	1.275	0.117	-0.899	1	5
Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourism adamages of tourism development. 3.263 1.192 -0.464 -0.553 1 5 1 5 -0.404 -0.580 -0.265 1 5 -0.404 -0.867 1 5 -0.404 -0.867 1 5 -0.524 1 5 -0.524 1 5 -0.524 1 5 -0.524 1 5 -0.524 -0.524 1 5 -0.524	preservation of natural						
improves the living conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development 1.211							
conditions of rural residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development Leads to the loss of indigenous culture. Local residents in tourism and pollution will costs and damages of tourism development.	=						
residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourism development. 3.263 1.192 -0.464 -0.553 1 5 1 1	_						
residents due to the construction of roads and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourism development. Local residents in tourism development. 3.711 1.104 -0.953 0.333 1 5		3.263	1.192	-0.464	-0.553	1	5
and public facilities. Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourism development. Local residents in tourism development. 3.016 1.311 0.062 -1.023 1 5 1 5 1.119 -0.580 -0.265 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 1		2.200	2				
Tourism development leads to an increase in crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourism development. Local residents in tourism development. 3.016 1.311 0.062 -1.023 1 5 -0.265 1 5 1.119 -0.580 -0.265 1 5 1 5 -0.404 -0.867 1 5 -0.524 1 5 -0.524 1 5 -0.524 1 5 -0.110 -0.183 1 5 -0.110 -0.183 1 5 -0.110 -0.183 1 5 -0.110 -0.110 -0.183 1 5 -0.110 -0.110 -0.183 1 5 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110 -0.110							
leads to an increase in crime. 3.016 1.311 0.062 -1.023 1 5							
Crime. Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourism development. 3.492 3.409 3	_						
Due to tourism development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.521 1.119 -0.580 -0.265 1 5 1 5 -0.404 -0.867 1 5 -0.647 -0.524 1 5 -0.110 -0.183 1 5		3.016	1.311	0.062	-1.023	1	5
development, traffic will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.521 1.119 -0.580 -0.265 1 5 1 5 1 5 1 5 1 1 -0.404 -0.867 1 5 1 5 1 5 1 5 1 1 1 1 1							
will increase. Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.466 1.211 -0.404 -0.867 1 5 -0.867 1 5 -0.524 1 5 -0.110 -0.183 1 5 0.333 1 5							
Dislike (hatred) towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.466 1.211 -0.404 -0.867 1 5 1 5 -0.404 -0.867 1 5 -0.524 1 5 -0.110 -0.183 1 5 0.333 1 5	• '	3.521	1.119	-0.580	-0.265	1	5
towards strangers will increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.466 1.211 -0.404 -0.867 1 5 1 5 -0.404 -0.867 1 5 -0.524 1 5 -0.110 -0.183 1 5 -0.110 -0.183 1 5 -0.110 -0.183 1 5							
increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.466 1.211 -0.404 -0.867 1 5 1 5 1.211 -0.404 -0.867 1 5 -0.524 1 5 -0.524 1 5 -0.110 -0.183 1 5 1 5 0.333 1 5	` '						
increase with tourism development. Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.492 1.224 -0.647 -0.524 1 5 1.104 -0.110 -0.183 1 5 1.104 -0.953 0.333 1 5	_	3 466	1 211	-0 404	-0.867	1	5
Noise and pollution will increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.492 1.224 -0.647 -0.524 1 5 0.981 -0.110 -0.183 1 5 1.104 -0.953 0.333 1 5		3.100	1.211	0.101	3.007		
increase due to tourism development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.492 1.224 -0.647 -0.524 1 5 -0.110 -0.183 1 5 1.104 -0.953 0.333 1 5	=						
development. Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.711 1.104 -0.953 0.333 1 5							
Tourism development leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.409 0.981 -0.110 -0.183 1 5 0.333 1 5		3.492	1.224	-0.647	-0.524	1	5
leads to the loss of indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.409 0.981 -0.110 -0.183 1 5 0.333 1 5	development.						
indigenous culture. Local residents in tourist areas bear the costs and damages of tourism development. 3.711 1.104 -0.953 0.333 1 5	Tourism development						
Local residents in tourist areas bear the costs and damages of tourism development. 3.711 1.104 -0.953 0.333 1 5	leads to the loss of	3.409	0.981	-0.110	-0.183	1	5
tourist areas bear the costs and damages of tourism development. 3.711 1.104 -0.953 0.333 1 5	indigenous culture.						
costs and damages of tourism development.	Local residents in						
tourism development.	tourist areas bear the	2711	1 104	0.052	0.222	1	_
tourism development.	costs and damages of	3./11	1.104	-0.953	0.333		3
	_						
	Organizational intelligence	3.485	0.860	-0.475	-0.178	1.4	4.929

Table 28 Mean of environmental awareness variable items.

Items	Mean	Standard deviation	Kurtosis	skewness	Min	Max
When I think about the damages caused by pollution, I get angry.	3.615	1.102	-0.511	-0.588	1	5
When I think about pollution caused by companies, I feel hopeless and upset.	3.461	1.162	-0.421	-0.718	1	5
Plastic bags, because they take centuries to decompose, contribute to pollution.	3.591	1.104	-0.519	-0.451	1	5
Nowadays, pollution is one of my main concerns.	3.508	1.131	-0.613	-0.283	1	5
Environmental Awareness	3.544	0.980	-0.521	-0.476	1	5

Table 29 Output of the Kolmogorov Smirnov test to check the normality of research variables.

Variable	significance level	value of the Kolmogorov-Smirnov statistic	Result
Vitality	0.021	0.187	Normal
vitanty	0.021	0.167	Nominai
Attitude towards sustainable	0.025	0.154	Normal
Tourism			
Organizational intelligence	0.033	0.068	Normal
Environmental Awareness	0.019	0.200	Normal

Table 30 Pearson correlation test results

		Vitality	Attitude towards sustainable tourism	Organizational intelligence	Environmental Awareness
Vitality	Correlatio n P-value	1.000			
Attitude towards sustainable	Correlatio n	0.789**	1.000		
tourism	P-value	0.001			
Organizational intelligence	Correlatio n	0.720**	0.788**	1.000	
menigenee	P-value	0.001	0.001		
Environmental awareness	Correlatio n	0.582**	0.698**	0.778**	1.000
awareness	P-value	0.001	0.001	0.001	

** Significant at the 0.01 level

Source: own work

Table 31 Convergent validity check

	Convergent Validity						
Factor	Cronbach's Alpha coefficient 0/7 < (a)	7 Composite reliability 0/7 < (CR)	Average Variance Extracted (AVE) 0.5 < (AVE)				
Environmental Awareness	0.893	0.927	0.761				
Social aspect	0.838	0.885	0.578				
Economic aspect	0.886	0.912	0.598				
Environmental aspect	0.704	0.834	0.629				
Cultural aspect	0.823	0.884	0.659				
Vitality	0.919	0.936	0.680				
Attitude towards sustainable tourism	0.950	0.955	0.525				
Organizational							
intelligence	0.945	0.953	0.594				

Table 32 checking the Discriminant validity in the research model.

	Environm ental awareness	Soci al aspe ct	Econo mic aspect	Environm ental aspect	Cultu ral aspect	Vital ity	Attitud e towards sustaina ble tourism	organizati onal intelligenc e
Environment								
al awareness								
Social aspect	0.749							
Economic	0.707	0.81						
aspect		4						
Environment	0.813	0.73	0.526					
al aspect		3						
Cultural	0.751	0.75	0.528	0.777				
aspect		2						
Vitality	0.646	0.72	0.83	0.986	0.905			
		7						
Attitude	0.751	0.85	0.653	0.676	0.766	0.847		
towards		2						
sustainable								
tourism								

organizati	0.849	0.76	0.81	0.82	0.854	0.768	0.828
onal		1					
intelligen							
ce							

Table 33 Values of the evaluation criteria in the structural model of the sub-model

Variable	\mathbb{R}^2	Q^2	
Social aspect	0.830	0.446	
Economical aspect	0.900	0.500	
Environmental aspect	0.793	0.473	
Cultural aspect	0.902	0.560	
Attitude towards			
sustainable tourism	0.772	0/372	
Organizational			
intelligence	0.537	0/287	

Source: own work

Table 34 values of structural model fit criteria

Items	Item symbol	Path Coefficient (β)	T value	Statistical Significance Level
I have a sense of vitality and	S1	0.751	14.449	0.001
energy.				
I don't feel very energized.	S2	0.866	61.358	0.001
Sometimes I feel alive and	S3	0.607	13.015	0.001
vibrant, and I can't contain it.				
I have a spirit and energy.	S4	0.837	51.421	0.001
I am eagerly awaiting each new	S5	0.894	99.651	0.001
day.				
I almost always feel awake and	S6	0.868	82.594	0.001
alert.				
I feel energized.	S7	0.908	143.363	0.001
Tourism development	N1	0.888	61.837	0.001
promotes diverse cultural				
activities.				
Tourism development leads to	N2	0.865	53.890	0.001
increased environmental				
interventions due to road and				
attraction development.				

Items	Item symbol	Path Coefficient (β)	T value	Statistical Significance Level
Tourism development results in increased local government expenses for fire safety and road construction, leading to higher taxes.	N3	0.744	31.647	0.001
Tourism facility development leads to the depletion of natural resources.	N4	0.681	18.317	0.001
Tourism development increases recreational facilities for residents.	N5	0.555	12.773	0.001
Tourism development contributes to the preservation of traditional buildings.	N6	0.837	61.089	0.001
Tourism development contributes to the preservation of natural resources.	N7	0.822	45.290	0.001
Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities.	N8	0.892	43.689	0.001
Tourism development leads to an increase in crime.	N9	0.876	59.411	0.001
Due to tourism development, traffic will increase.	N10	0.882	66.672	0.001
Dislike (hatred) towards strangers will increase with tourism development.	N11	0.519	12.590	0.001
Noise and pollution will increase due to tourism development.	N12	0.866	64.124	0.001
Tourism development leads to the loss of indigenous culture.	N13	0.667	17.590	0.001
Local residents in tourist areas bear the costs and damages of tourism development.	N14	0.821	44.601	0.001
Tourism creates job opportunities.	N15	0.908	100.644	0.001
Tourism development encourages investment in the area.	N16	0.689	18.282	0.001
Tourism development provides small job opportunities for local residents.	N17	0.657	16.347	0.001
Tourism provides significant economic benefits.	N18	0.781	34.669	0.001

Items	Item symbol	Path Coefficient (β)	T value	Statistical Significance Level
Tourism development enhances	N19	0.838	71.867	0.001
the cultural pride of residents.				
Tourism development increases	N20	0.787	42.258	0.001
the income of residents.				
Employees demonstrate double	H1	0.826	42.657	0.001
effort.	***	0.554	22.512	0.004
Organizational strategies are	H2	0.774	33.643	0.001
reviewed annually.	110	0.007	12.772	0.001
Organizational goals are clear	Н3	0.805	43.752	0.001
and transparent.	TT 4	0.011	42.741	0.001
Employees have continuous and	H4	0.811	43.741	0.001
stable relationships with each				
other.	115	0.905	02.274	0.001
Employees take pride in their workplace organization.	H5	0.895	93.374	0.001
Managers value knowledge.	Н6	0.770	31.407	0.001
Employees help each other.	H7	0.770	49.977	0.001
All employees contribute to the	H8	0.820	25.638	0.001
organization's programs and	По	0.722	23.036	0.001
achievements.				
Feedback is provided to	H9	0.821	54.458	0.001
employees.	11)	0.021	31.130	0.001
The organizational structure	H10	0.858	53.669	0.001
aligns with the work process.		0.020	33.007	0.001
The work process is	H11	0.565	12.357	0.001
evolutionary.				
The organizational climate is	H12	0.775	45.232	0.001
ready for change.				
Operational policies support the	H13	0.508	12.476	0.001
organization's mission.				
Learning and professional	H14	0.508	28.162	0.001
growth of employees are				
emphasized in the organization.				
When I think about the damages	A1	0.769	30.971	0.001
caused by pollution, I get angry.				
When I think about pollution	A2	0.915	113.463	0.001
caused by companies, I feel				
hopeless and upset.				
Plastic bags, because they take	A3	0.891	78.162	0.001
centuries to decompose,				
contribute to pollution.				
Nowadays, pollution is one of	A4	0.906	93.730	0.001
my main concerns.				

Table 35 examines the direct relationships of research variables.

Criterion structure	Path Coefficient (β)	t- value	Statistical Significance Level	\mathbf{F}^2
Vitality —> Attitude towards sustainable tourism	0.500	12.961	0.001	0.474
Organizational intelligence > Attitude towards sustainable tourism	0.299	5.384	0.001	0.203
Environmental awareness — > Attitude towards sustainable tourism	0.148	3.647	0.001	0.137
Vitality —> Organizational intelligence	0.733	27.627	0.001	0.461

Table 36 examining the indirect relationships of the research variables.

Criterion structure	Path Coefficient (β)	t- value	Statistical Significance Level
Vitality —> Organizational intelligence—> Attitude towards sustainable tourism	0.219	5.513	0.001
Vitality * Environmental awareness —> Attitude towards sustainable tourism	0.094	4.150	0.001

Source: Own Work

Table 37 examining the impact of vitality on the attitude towards sustainable tourism.

	Path Coefficient (β)	t- value	P - value
Vitality —>Attitude towards sustainable tourism	0/500	12/961	0/001

Table 38 examining the impact of vitality on organizational intelligence.

Path Coefficient (β) t- value P - value	t- value P - value
--	--------------------

0.733 27.627 0.001

Source: Own Work

Table 39 examining the impact of vitality on organizational intelligence.

	Path Coefficient (β)	t- value	P - value
Organizational intelligence —>			
Attitude towards sustainable tourism	0.29	5.384	0.001

Source: Own Work

Table 40 examining the impact of vitality on the attitude towards sustainable tourism with the mediating role of organizational intelligence.

	Path Coefficient (β)	t- value	P - value
Vitality—> Organizational intelligence —> Attitude towards sustainable tourism	0.219	5.513	0.001

Source: Own Work

Table 41 examining the impact of vitality on the attitude towards sustainable tourism with the moderating role of environmental awareness.

	Path Coefficient (β)	t- value	P - value
Vitality* Environmental awareness —> Attitude towards sustainable tourism	0.094	4.150	0.001

Table 42 Summary of research results

Number	hypotheses	Results
1	Vitality has a positive and significant impact on attitude towards	Hypothesis
	sustainable tourism in senior managers of travel agencies.	accepted
2	Vitality has a positive and significant impact on organizational	Hypothesis
	intelligence in senior managers of travel agencies.	accepted
3	Organizational intelligence has a positive and significant impact on	Hypothesis
	sustainable tourism orientation in senior managers of travel agencies.	accepted

4	Vitality has a positive and significant indirect effect on sustainable	Hypothesis
	tourism orientation in senior managers of travel agencies through	accepted
	the mediating role of organizational intelligence.	
5	Vitality has a positive and significant moderating effect on the	Hypothesis
	relationship between environmental awareness and attitude towards	accepted
	sustainable tourism in senior managers of travel agencies.	
6	Vitality has a positive and significant impact on attitude towards	Hypothesis
	sustainable tourism in senior managers of travel agencies.	accepted
7	Vitality has a positive and significant impact on organizational	Hypothesis
	intelligence in senior managers of travel agencies.	accepted
8	Organizational intelligence has a positive and significant impact on	Hypothesis
	attitude towards sustainable tourism in senior managers of travel	accepted
	agencies.	

Appendix 2 Figures

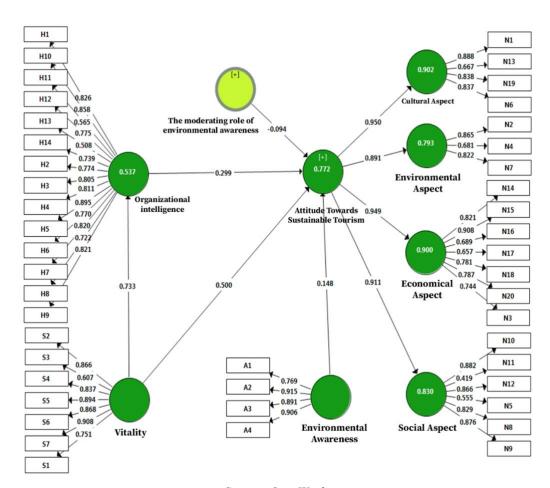
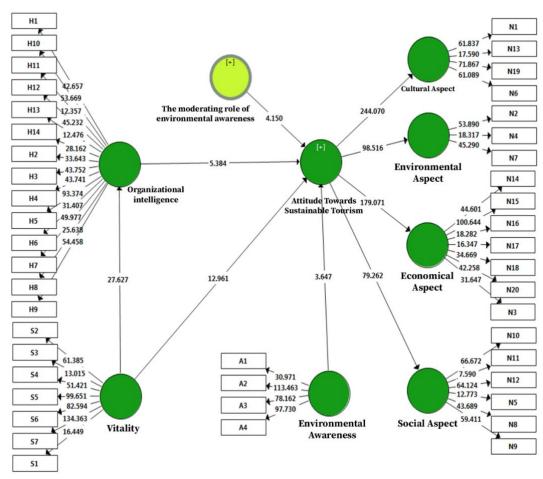


Figure 3 Factor Loadings in Standardized Estimation.

t-values

Figure 4 t-values of relationships of the main research model



Appendix 3 Questionnaire

Please assist us in completing this questionnaire with your attention and care.

Gender: Male O Female O

Work Experience: Less than 7 years O 8-14 years O 15-21 years O More than 21 years O

Age: 25-35 O 36-45 O 46-55 O Over 55 years O

Educational Level: bachelor's degree O master's degree O Doctorate O

Vitality		Strongly	Agree	Undecided	Disagree	Strongly
		agree				Disagree
1.	I have a sense of vitality					
	and energy.					
2.	I don't feel very energized.					
3.	Sometimes I feel alive and					
	vibrant, and I can't contain					
	it.					
4.	I have a spirit and energy.					

5.	I am eagerly awaiting each			
	new day.			
6.	I almost always feel awake			
	and alert.			
7.	I feel energized.			

Attitude	Towards Sustainable	Strongly	Agree	Undecided	Disagree	Strongly
Tourism	1	agree				Disagree
1.	Tourism development promotes diverse cultural activities					
2.	Tourism development leads to increased environmental interventions due to road and attraction development.					
3.	Tourism development results in increased local government expenses for fire safety and road construction, leading to higher taxes.					
4.	Tourism facility development leads to the depletion of natural resources.					
5.	Tourism development increases recreational facilities for residents.					
6.	Tourism development contributes to the preservation of traditional buildings.					
7.	Tourism development contributes to the preservation of natural resources.					
8.	Tourism development improves the living conditions of rural residents due to the construction of roads and public facilities.					
9.	Tourism development leads to an increase in crime.					

10. Due to to	ouriem		1
	ment, traffic will		
increase.			
	hatred) towards		
_	s will increase with		
	development.		
	d pollution will		
	due to tourism		
develop			
	development leads		
to the los	ss of indigenous		
culture.			
14. Local res	sidents in tourist		
areas bea	ar the costs and		
damages	of tourism		
develop	ment.		
15. Tourism			
opportur	ities.		
16. Tourism	development		
	ges investment in		
the area.			
17. Tourism	development		
	small job		
_	nities for local		
residents			
18. Tourism			
	nt economic		
benefits.			
	development		
	s the cultural pride		
of reside			
	development		
	s the income of		
residents			
residents			

Organiz	zational Intelligence	Strongly	Agree	Undecided	Disagree	Strongly
		agree				Disagree
1.	Organizational strategies					
	are reviewed annually.					
2.	Organizational strategies					
	are reviewed annually.					
3.	Organizational goals are					
	clear and transparent.					
4.	Employees have					
	continuous and stable					

	relationships with each			
	other.			
5.	Employees take pride in			
	their workplace			
	organization.			
6.	Managers value			
	knowledge.			
7.	Employees help each other.			
8.	All employees contribute to			
	the organization's programs			
	and achievements.			
9.	Feedback is provided to			
	employees.			
10.	The organizational			
	structure aligns with the			
	work process.			
11.	The work process is			
	evolutionary.			
12.	The organizational is ready			
	for change.			
13.	Operational policies			
	support the organization's			
	mission.			
14.	Learning and professional			
	growth of employees are			
	emphasized in the			
	organization.			

Environmental Awareness		Strongly	Agree	Undecided	Disagree	Strongly
		Agree				Disagree
1.	When I think about the damages					
	caused by pollution, I get angry.					
2.	When I think about pollution					
	caused by companies, I feel					
	hopeless and upset.					
3.	Plastic bags, because they take					
	centuries to decompose,					
	contribute to pollution.					
4.	Nowadays, pollution is one of					
	my main concerns.					

Appendix 4 KMO Outcomes

Vitality

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy916				
Bartlett's Test of Sphericity	Approx. Chi-Square	1955.071		
	df	21		
	Sig.	.000		

Attitude Towards Sustainable Tourism

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy894				
Bartlett's Test of Sphericity	Approx. Chi-Square	6740.864		
	df	190		
	Sig.	.000		

Organizational Intelligence

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy899			
Bartlett's Test of Sphericity	Approx. Chi-Square	5647.657	
	df	91	
	Sig.	.000	

Environmental Awareness

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy812				
Bartlett's Test of Sphericity	Approx. Chi-Square	1009.670		
	df	6		
	Sig.	.000		

Cronbach's alpha

Vitality

Reliability Statistics

Cronbach's Alpha	N of Items
.920	7

Attitude Towards Sustainable Tourism

Reliability Statistics

Cronbach's Alpha	N of Items
.947	20

Organizational Intelligence

Reliability Statistics

Cronbach's Alpha	N of Items
.944	14

Environmental Awareness

Reliability Statistics

Cronbach's Alpha	N of Items
.894	4

Demography

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	289	75.3	75.3	75.3
	2.00	95	24.7	24.7	100.0
	Total	384	100.0	100.0	

Age						
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1.00	76	19.8	19.8	19.8	
	2.00	158	41.1	41.1	60.9	
	3.00	111	28.9	28.9	89.8	
	4.00	39	10.2	10.2	100.0	
	Total	384	100.0	100.0		

Work Experience						
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1.00	72	18.8	18.8	18.8	
	2.00	145	37.8	37.8	56.5	
	3.00	114	29.7	29.7	86.2	
	4.00	53	13.8	13.8	100.0	
	Total	384	100.0	100.0		

Descriptive Statistics

	N	Minimum	Maximu m	Mean	Std. Deviatio	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statisti c	n Statistic	Statisti c	Std. Erro	Statisti c	Std. Erro
	201	4.00			0==11	0.1.5	r	4.04.0	r
Vitality	384	1.00	5.00	3.3203	.97566	.012	.125	-1.013	.248
Attitude	384	1.40	5.20	3.8029	.89391	560	.125	117	.248
Organizati onal Intelligenc e	384	1.43	4.93	3.4855	.85983	475	.125	178	.248
Environm ental Awarenes	384	1.00	5.00	3.5436	.97983	521	.125	476	.248
S									
S1	384	1.00	5.00	3.5026	1.14029	394	.125	916	.248
S2	384	1.00	5.00	3.3490	1.14627	002	.125	-1.128	.248
S3	384	1.00	5.00	3.6927	1.03179	518	.125	490	.248
S4	384	1.00	5.00	3.2422	1.30921	013	.125	-1.235	.248
S5	384	1.00	5.00	3.0286	1.27097	.092	.125	-1.125	.248
S6	384	1.00	5.00	3.1302	1.22153	.034	.125	976	.248
S7	384	1.00	5.00	3.2969	1.16314	046	.125	961	.248
N1	384	1.00	5.00	3.4167	1.10698	078	.125	-1.125	.248
N2	384	1.00	5.00	3.5990	1.16323	466	.125	878	.248
N3	384	1.00	5.00	4.0208	1.09810	-1.290	.125	1.090	.248
N4	384	1.00	5.00	3.2318	1.35228	090	.125	-1.265	.248
N5	384	1.00	5.00	2.9896	1.49495	114	.125	-1.489	.248
N6	384	1.00	5.00	3.9427	1.18160	-1.168	.125	.499	.248
N7	384	1.00	5.00	4.0833	1.02110	-1.248	.125	1.168	.248
N8	384	1.00	5.00	3.8490	1.14855	793	.125	152	.248
N9	384	1.00	5.00	3.7969	1.07688	711	.125	155	.248
N10	384	1.00	5.00	4.0104	.94214	812	.125	.338	.248
N11	384	1.00	5.00	3.5026	1.24535	320	.125	-1.066	.248
N12	384	1.00	5.00	3.8047	1.22459	728	.125	591	.248
N13	384	1.00	5.00	3.2865	1.25838	.016	.125	-1.260	.248
N14	384	1.00	5.00	3.3802	1.18133	122	.125	971	.248
N15	384	1.00	5.00	3.7109	1.22519	581	.125	776	.248
N16	384	1.00	5.00	3.4661	1.21303	185	.125	-1.028	.248
N17	384	1.00	5.00	3.3151	1.23997	236	.125	994	.248
N18	384	1.00	5.00	3.5130	1.15387	304	.125	959	.248
N19	384	1.00	5.00	3.0521	1.38903	005	.125	-1.316	.248
N20	384	2.00	5.00	4.1432	1.10674	960	.125	550	.248
H1	384	1.00	5.00	3.9010	.94529	-1.367	.125	1.865	.248
H2	384	1.00	5.00	3.5625	1.02768	728	.125	.117	.248
H3	384	1.00	5.00	3.7005	1.07979	970	.125	.496	.248
H4	384	1.00	5.00	3.6016	1.05221	-1.027	.125	.466	.248

H5	384	1.00	5.00	3.8464	1.01675	-1.351	.125	1.513	.248
Н6	384	1.00	5.00	3.3776	1.18987	576	.125	531	.248
H7	384	1.00	5.00	2.9297	1.27550	.117	.125	899	.248
H8	384	1.00	5.00	3.2630	1.19227	464	.125	553	.248
Н9	384	1.00	5.00	3.0156	1.31064	.062	.125	-1.023	.248
H10	384	1.00	5.00	3.5208	1.11930	580	.125	265	.248
H11	384	1.00	5.00	3.4661	1.21087	404	.125	867	.248
H12	384	1.00	5.00	3.4922	1.22419	647	.125	524	.248
H13	384	1.00	5.00	3.4089	.98130	110	.125	183	.248
H14	384	1.00	5.00	3.7109	1.10413	953	.125	.333	.248
A1	384	1.00	5.00	3.6146	1.10181	511	.125	588	.248
A2	384	1.00	5.00	3.4609	1.16230	421	.125	718	.248
A3	384	1.00	5.00	3.5911	1.10400	519	.125	451	.248
A4	384	1.00	5.00	3.5078	1.13107	613	.125	283	.248
Valid N	384								
(listwise)									

Correlations						
		Vitality	Attitude	Organizational	Environmental	
				Intelligence	Awareness	
Vitality	Pearson Correlation	1	.789**	.720**	.582**	
	Sig. (2-tailed)		.000	.000	.000	
	N	384	384	384	384	
Attitude	Pearson Correlation	.789**	1	.788**	.698**	
	Sig. (2-tailed)	.000		.000	.000	
	N	384	384	384	384	
Organizational	Pearson Correlation	.720**	.788**	1	.778**	
Intelligence	Sig. (2-tailed)	.000	.000		.000	
	N	384	384	384	384	
Environmental	Pearson Correlation	.582**	.698**	.778**	1	
Awareness	Sig. (2-tailed)	.000	.000	.000		
	N	384	384	384	384	
**. Correlation is	s significant at the 0.01 le	evel (2-tailed).	•		