Information Sciences Letters
An International Journal

http://dx.doi.org/10.18576/isl/110537

Ecotourism Intention in Jordan: The Role of Ecotourism Attitude, Ecotourism Interest, and Destination Image

Mohammad Faleh Hunitie[1], *Shadi Saraireh* [2], *Hussein Salem Al-Srehan* [3], *Ali Zakariya Al- Quran* [4], *Suleiman Alneimat* [5], *Sulieman Ibraheem Al-Hawary* [4,*], *and Muhammad Turki Alshurideh*[6]

[1]Department of Public Administration, School of Business, The University of Jordan, Amman, Jordan
[2]Banking and Financial Sciences Department, Amman College of Banking and Financial Sciences, Al-Balqa Applied University, Amman, Jordan
[3]College of Education, Humanities and Social Science, Al Ain University, Al Ain, UAE
[4]Department of Business Administration, School of Business, Al al-Bayt University, Mafraq, Jordan
[5]Business Administration, Quality, and Strategic Management, Amman, Jordan
[6]Department of Marketing, School of Business, The University of Jordan, Amman, Jordan

Received: 2 Mar. 2022, Revised: 22 May 2022, Accepted: 18 Jun. 2022
Published online: 1 Sep. 2022

Abstract: The goal of this research was to check the impact of eco-tourism attitude, eco-tourism interest, and destination image on eco-intention. The sample size of this study was 309, gathered using convenience sampling. The data collection instrument was developed using five-point Likert scale. The data was analyzed by using PLS-SEM. The findings of data analysis showed that the ecotourism attitude was positively affecting the ecotourism interest. However, ecotourism attitude was not significantly affecting the ecotourism intention. The ecotourism interest was positively affecting the ecotourism intention. The destination image was also significantly affecting ecotourism intention. Ecotourism service operators may work with tourism community members for creating projects targeting domestic people and provide them with learning experiences regarding nature, ecological and cultural heritage protection attempts and initiatives, and how ecotourism will support such efforts and initiatives and conserve them.

Keywords: Eco-tourism Attitude, Eco-tourism Interest, Destination Image, Eco-intention, Saudi Arabia

1 Introduction

Ecotourism is a specific form of sustainable tourism strongly related to environmentally and culturally vulnerable regions [1]. This was created in an attempt to avoid the traditional mass tourism issues and consequences [2]. Because ecotourism contributes both to the protection of the ecosystem and to the economy, it has grown in the tourism industry [3]. Ecotourism has been defined in different ways, also named eco-tourism or nature-based tourism [4]. In the literature review report, Bjork defined ecotourism as an activity, relied on a set of terms developed in the present literature, in which governments, the tourism industry, tourists and residents allow visitors to travel to actual places to take a look at and enjoy nature and heritage in a way that does not misuse the available resources but contributes to improving them [5]. This explanation provides a detailed understanding of ecotourism and discusses the numerous sorts of stakeholders participating in ecotourism; nonetheless, it is overly complex for the purposes of this assessment [3]. Simply said, this work is about ecotourism, which is a type of tourism that focuses on the discovery and protection of natural resources.

As a result, this paper explains ecotourism as a tourist's intention to visit an ecotourism location in the near future. Many studies examined variables which could have an effect on tourist travel motive and the desire to extra pay for ecotourism products, for example, the visitors' ecotourism defiance and their preference [6]. Although identifying visitors 'ecotourism attitudes and concerns are absolutely a critical requirement for the successful enforcement of ecotourism initiatives, a review of the background of individuals' ecotourism attitudes and concerns could be more pertinent to ecotourism operators. This research could enable the operators to

* Corresponding author e-mail: dr_sliman73@aabu.edu.jo, dr_sliman@yahoo.com

acquire a deeper sight in determining mechanisms that are appropriate for applying or performing in order to enhance customers' positive attitudes and commitment to ecotourism [7].

As a result of climate change and rising ecological concerns, ecotourism has had increased the attention of professionals and academics alike [8]. Academically, in spite of many forms of research appearance about the ecotourism activities chronicle, the realization of variables impacting demand for ecotourism is still scarce. Accordingly, further research is necessary to discuss factors that potentially increase travellers' desire to visit ecotourism places that have yet to be explained in the present literature [9]. The emergence of such studies will enable a better comprehension of the purpose of ecotourism, thus will lead the development of more appropriate mechanisms for promoting its expansion. Based on the present literature, this study predicts that individuals' expectations about destination image are a significant factor that could impact the choice of their tourism destinations. Although an eco-destination image, which is known as a "person's understanding of an ecotourism site", induces travellers' ecological friendly attitudes, there are no further accomplishments about how the impact of an eco-destination image on travellers' environmentally safe behaviours may influence their intention to visit ecotourism destinations [10,11].

Ecotourism studies have made considerable strides in discussing the demand factor of ecotourism, in particular concerning the determinants of ecotourism activity, in which environmental attention is generally demonstrated as a precedent [12]. The analytical research on the demand side of ecotourism has given less attention to the intention of ecotourism, although more emphasis has been focused on recognizing the customer desires, happiness, and demographic characteristics of ecotourism as shown in [13] analyses. Hence, the objective of this study is to check the impact of eco-tourism attitude, eco-tourism interest, and destination image on eco-intention.

The paper structured to include section 2 consists of a literature review, hypotheses development. Section 3has included research design, approach, sampling technique, data analysis technique. Section 4 includes data analysis and hypothesis testing whereas section 5 includes conclusion and recommendation for both managers and potential researchers.

2 Theoretical framework and hypotheses development

Because individuals' tends toward ecotourism is deemed the major critical antecedents of the travel decision to ecotourism planned destinations and engage in ecotourism events [14,15]. Knowing their function needs to define and classify behaviors in a structured and multi-dimensional structure reflecting their structural significance with respect to their expectations and perspectives [16]. A variety of social psychologists, such as [4], proposed that behaviors may function as bases of intention on how people communicate with their surroundings. Only [17] claimed that behaviors have psycho-dynamic roles that enable individuals to behave in such ways.

This mindset became one of the mechanisms most researched in the humanities sciences and was exercised to characterize measurable behavioural consistencies [18]. A meta-analysis, conducted by [19] in an effort to explain the variable(s) (attitude, awareness of the problem, awareness of action strategies, locus of influence, etc.) tend to be the critical significant foreteller of the ecological behaviour of customers, the attitude has been reported as the main powerful predictor of the green consumer conduct plan. Based on the previous subject, customer purpose and engagement in ecotourism could be the predicted research constructs that are positively foretold by consumers' appropriated attitudes towards ecotourism. Hence, the research hypotheses were suggested:

H1:Ecotourism interest is positively influenced by ecotourism attitude.

H2:Ecotourism intention is positively influenced by ecotourism attitude.

Authors in study [20] argued that several of the commonly established ecotourism concepts include three specific components, which are nature-based climate, ecological awareness, and sustainability. As the main objective of the current research was not to profile the attitudes and behaviors of any specific ecotourism segment but to investigate the impact of materialism interest on people's attitudes towards ecotourism, this research represented ecotourism in prevalent meaning using the common features listed in the studies instead of diminishing it down to any particular ecotourism segment. Hence, eco-tourists were classified in the paper as those who are concerned not only with cultural and ecological preservation but also with wildlife and natural experiences and analysis [21]. This illustration clearly indicates that eco-tourists plan to visit an eco-tourism site not just to relax and escape, but also to learn about ecology and biodiversity [22]. Customers' interest in ecotourism is likely to increase their desire to invest in ecotourism-related products and services. The following hypothesis is suggested, based on the previous discussion:

H3: Ecotourism intention is positively influenced by ecotourism interest.

Destination image may be interpreted as the ultimate consciousness or absolute perceptions of a place's person [23]. Destination image considers a crucial role in decisions surrounding travel. It affects the decision-making cycle around destination preferences and also determines the post-decision activities like

engagement, appraisal, and potential behavioral expectations [24]. If a visitor has a good impression of a place, it enhances the probability of visiting the venue. Extended observational studies [18] note the positive impact on travel intention of the destination image. In brief, if an eco-destination seems appealing to a visitor, they would have a better probability of going to the eco-destination. Thus, the fourth research hypothesis was: *H4: Ecotourism intention is positively influenced by eco-destination image.*

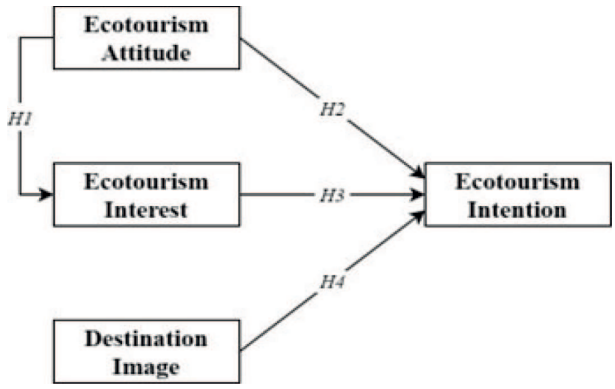

Figure 1: Conceptual Model

3 Methodology

3.1 Research design

The positivistic philosophical approach to research focused on the extension and enrichment of knowledge-base of the research horizon and it is widely accepted in understanding human behavior [25,26,27,28,29,30]. Herein, the pre-existing phenomenon of the ecotourism emphasizes on the theory-testing approach for understanding the behavioral intention towards ecotourism and therefore, quantitative research choice fits well with the objective. However, the subjectivity of the research horizon stresses the logical reasoning for behavioral intention that aims towards ecotourism in Jordan based on the attitudes [31], opinions, and perspectives of the large-scale population. In this regard, the objective of the study particularly absorbed the determinants of behavioral intention towards ecotourism using nonrandom and non-manipulative explanatory variables and therefore, non-experimental correlational design has been embedded in the methodological perspective of the paper.

3.2 Sampling design

Jordan's tourism sector grew at a slower rate than the average, despite the fact that tourism is an important and growing industry, accounting for 19.2 percent of the country's GDP in 2018. As the sector was not increasing at an exponential rate, the study concentrated on gathering 250 responses from Jordanian local tourists. As a result, the current study's sample was estimated using the N10 method proposed by [32], where N is the number of items. Furthermore, convenience sampling was performed, which deals with gathering data from persons who are easily and conveniently available and have no recognized precise rule for data collection. The demographics of respondents have been shown in the following table 1.

Table 1: Demographics statistics *(N=309)*

		Frequency	Percent
Gender	Male	169	54.7
	Female	140	45.3
Age Group	Less than 18	50	16.2
	20-29	130	42.1
	30-39	99	32.0
	Above 40	30	9.7
Education	Undergraduate	89	28.8
	Graduate	190	61.5
	Post-Graduate	30	9.7
Frequency of Visit	Less than 2 times in an year	29	9.4
	2 - 5 times in an year	30	9.7
	5 - 7 times in an year	120	38.8
	More than 7 times in an year	130	42.1

3.3 Data collection

The current study has used survey methodology comprising of a self-administered questionnaire focusing on collecting data using the face-to-face process and it helped in decreasing the biases from the data [33,34,35,36,37,38]. Also, a five-point Likert scale was used which developed a close-ended questionnaire and it provided more significant and enhanced results [39].

3.4 Data analysis

The SEM analysis technique using PLS was used in this study using Smart-PLS 3.2.8 that deals with high and in-depth variance and gives effective validity and reliability as well [40,41,42]. Similarly, the hypothesis testing in this analysis technique provided relatively high significant results and gave quite better and improved logical conclusions [43].

3.5 Ethical considerations

The research process was kept highly confidential and secure and the data provided by the respondents was used only for academic and research purposes [44]. Also, respondent's consent was taken and their desire to leave the data collection process was also respected as well.

4 Data analysis results

4.1 Measurement model

The following table 2 has shown the measurement model results.

Table 2: Measurement model

Variables	Items	Loadings	Alpha	CR	AVE
Destination Image	DI2	0.916	0.923	0.946	0.814
	DI3	0.935			
	DI4	0.903			
Ecotourism Attitude	EA1	0.877	0.824	0.895	0.740
	EA3	0.809			
	EA4	0.893			
Ecotourism Interest	EI2	0.886	0.830	0.898	0.747
	EI3	0.875			
	EI4	0.830			
Ecotourism Intention	EIT1	0.799	0.836	0.901	0.753
	EIT2	0.942			
	EIT3	0.857			

Table 2 showed outer loadings that have a recommended threshold given by [45] that all values must be greater than 0.70. Also, the values of CR and AVE should be higher than the recommended threshold given by [46]. The threshold is 0.70 and 0.50 respectively. Hence, the above table had achieved a measurement model.

4.2 Discriminant validity

The following table 3 has shown Fornell and Larcker criterion.

Table 3: Fornell-Larcker Criterion

	DI	EA	EIT	EI
Destination Image	**0.902**			
Ecotourism Attitude	0.665	**0.860**		
Ecotourism Intention	0.726	0.579	**0.868**	
Ecotourism Interest	0.571	0.591	0.716	**0.864**

Table 3 has a recommended limits that all values are presented in a diagonal form should be higher in their constructs as compared to other values. Hence, the table had shown all values according to the threshold and therefore, discriminant validity had been achieved using [47]. The following table 4 has shown results of cross-loadings.

Table 4: Crossloadings

	DI	EA	EI	EIT
DI1	**0.852**	0.514	0.427	0.604
DI2	**0.916**	0.539	0.523	0.612
DI3	**0.935**	0.655	0.568	0.679
DI4	**0.903**	0.672	0.532	0.713
EA1	0.593	**0.877**	0.484	0.564
EA3	0.575	**0.809**	0.451	0.401
EA4	0.554	**0.893**	0.581	0.515
EI2	0.505	0.520	**0.886**	0.554
EI3	0.535	0.537	**0.875**	0.585
EI4	0.440	0.476	**0.830**	0.706
EIT1	0.456	0.392	0.545	**0.799**
EIT2	0.776	0.588	0.721	**0.942**
EIT3	0.611	0.502	0.578	**0.857**

Table 4 has a recommended threshold that all bold values should be higher in their constructs as compared to other values [48]. Therefore, discriminant validity had been achieved using cross-loadings.

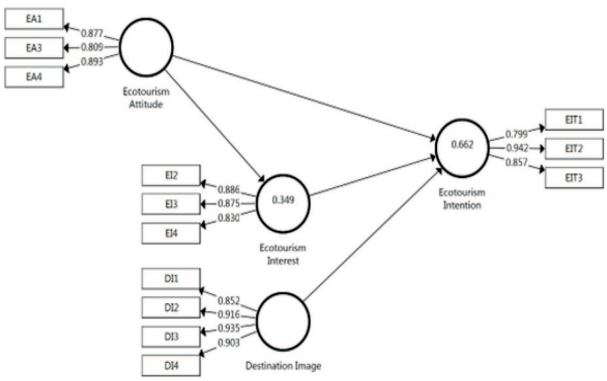

Figure 2: PLS Algorithm

The following table 5 has shownthe results of HTMT ratio.

Table 5: Heterotrait-Monotrait Ratio (HTMT)

	DI	EA	EIT	EI
Destination Image				
Ecotourism Attitude	0.760			
Ecotourism Intention	0.803	0.680		
Ecotourism Interest	0.650	0.711	0.845	

The above table has a recommendation that all values in the table should be less than 0.90 for acceptance [49].

Hence, the table showed all acceptable values and therefore, the discriminant value had been achieved using HTMT ratio.

4.3 Structural model

The following table 6 has shown the results of path analysis.

Table 6: Path Analysis using PLS-SEM

	Estimate	T-Stats	Prob.
Destination Image → Ecotourism Intention	0.469	9.082	0.000
Ecotourism Attitude → Ecotourism Intention	0.003	0.084	0.933
Ecotourism Attitude → Ecotourism Interest	0.591	17.519	0.000
Ecotourism Interest → Ecotourism Intention	0.447	9.199	0.000

The above table showed that the ecotourism attitude was positively affecting the ecotourism interest (0.591, P<0.05). However, ecotourism attitude was not significantly affecting the ecotourism intention (0.003, P>0.05). The ecotourism interest was positively affecting the ecotourism intention (0.447, P<0.05). The destination image was also significantly affecting the ecotourism intention (0.469, P<0.05).

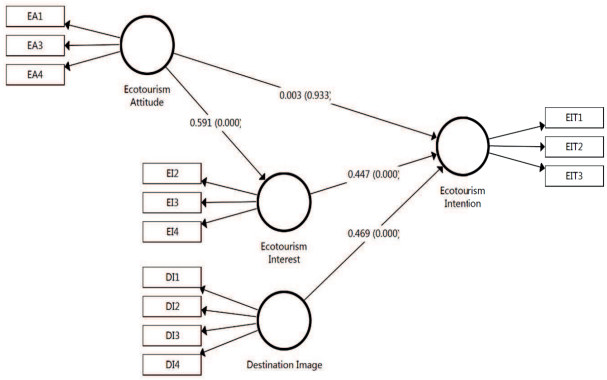

Figure 3: PLS Bootstrapping

The following table 7 shows the results of predictive relevance.

Table 7: Predictive Relevance

	R Square	Q Square
Ecotourism Intention	0.662	0.466
Ecotourism Interest	0.349	0.248

The above table showed that the ecotourism interest was affected 34.9% and ecotourism intention was affected 66.2% by the independent variables. Moreover the values of Q-square were also found higher than perfect zero.

5 Conclusion

This work gives significant academic contributions to the novel ecotourism studies and sustainable development of tourism. Unlike another previous ecotourism research, which showed the positive correlation between people's ecological values / attitudes and their stimulus and behaviours for ecotourism [50,51]. The research enhances the literature on tourism through its results that confirm the major positive impacts of customer ecotourism's appropriate attitude on their participation in ecotourism, ecotourism purpose. It further offers scientific evidence to use logical action theories in attempting to grasp and describe the reactions of individuals to perceptions and actions surrounding ecotourism. This result is compatible with [52,53], regarding the major impact of eco-destination image on eco-tourism intention. While these studies also directly investigate the relation among eco-destination image and ecotourism intention, the result of this research, similar to theirs, suggests that destination image practices a major role in the decision-making process for travel.

Nonetheless, different from previous studies; finding from this research gives further insight into the function of the picture of eco-destination [1]. According to this analysis, in particular, the direction of "eco-destination image-environment associated with eco-tourism intention" appears apparent. Eco-destination image affects the decision-making cycle on travel and also leads to the growth of the optimistic mindset of tourists towards the environment, which in effect reinforces their eco-tourism preference [1]. Therefore, efforts to create or boost a destination's eco-image encourage sustainable tourism growth. The findings also show that the ecotourism mindset of customers will positively affect the intention of ecotourism, the interest of ecotourism. These results are compatible with the logic behind the reasoned action theory [54]. The TRA model demonstrates that behaviors are dictated by the desire of an individual to conduct a particular action, and that behavioral purpose is extracted from two factors: (1) behavioral attitude and (2) social norms [55,56].

The results of this report give certain realistic consequences for the operators and advertisers of ecotourism [17]. Findings strongly show that an individual's attitude would impact his / her desire to buy ecotourism goods and his / her ability to offer them a premium. This indicates that designing and introducing engagement approaches to build or improve the optimistic perceptions of customers towards ecotourism is essential to the viability and sustainability of ecotourism operations [57]. To that end, the ecotourism, operators , agents, guides could jointly improve interaction plans and resources in order to highlight the majority of ecotourism

advantages relying on protecting the ecologic and heritage while producing meaningful opportunities for domestic population. For instance, ecotourism service operators that collaborate with members of the tourism community to create projects that target local people and provide them with learning experiences about efforts and initiatives to preserve wildlife, the environment and cultural resources, and how ecotourism can help and maintain these efforts.

Research showed that most eco-tourists prefer to travel together with partners or as a couple to maximize participation [58]. So an efficient and successful solution is that municipal and central agencies should create market and development campaigns and strategies aimed at improving the attitudes of customers around environmental and socio-cultural issues. These strategies and initiatives would stress the value of preserving the ecosystem as well as promoting minor behavioral improvements to help preserve environmental and socio-cultural capital better, thus growing the satisfaction of people in life and enhancing the overall quality of life. Operators should have services and events that are family-oriented around nature and biodiversity in the ecotourism and to target specific groups. Community citizens may often be given exclusive incentives by operators to encourage them to seek ecotourism goods within their neighborhoods. This will boost the positive attitudes of people within their society and promote ecotourism operations. Moreover, it is equally important to encourage and understand potential economic benefits from ecotourism through a region.

Tourism decision-makers can connect with local people and communicate the value of ecotourism in work development and leisure opportunities via different media channels such as Twitter, TV, radio, journal, printed content, etc. For better awareness and marketing, ecotourism promoters may even organize a sequence of special ecotourism activities and festivals. Increases in customer education and understanding of the value and advantages of ecotourism are likely to result in a mindset conducive to ecotourism. This, in effect, will tend to raise market interest in ecotourism, desire, and ability to produce more ecotourism goods, like listed in this research.

6 Limitations and suggestions for future research

This research may be constrained by the form of data collecting followed. Another disadvantage of this research is cross-sectional nature, which may restrict the opportunity to analyze the evolving behaviors of participants over time. This can also trigger the causal association among independent and dependent constructs to be misidentified. Future work will tackle these concerns by the use of longitudinal methods to identify and track differences and patterns between topics. This work is only confined to the Jordanian travelers' background. This thesis promotes more research utilizing data obtained from other nations. Readers will consider the probability of gender inequality in responses when analyzing information. For generalizability purposes, it is highly advised that subsequent experiments utilize a random sampling method. Potential experiments would ideally be carried out on a cross-national population collected at random to resolve this question regarding generalizability. Last but not least, all the endogenous factors included in this analysis are tests of behavioral expectations of the subjects, not actual behaviors. Based on several observational research it has been seen that the personal expectations of people to participate in pro-ecological behaviors were not necessarily ensure which they could participate in pro-ecological behaviors. Therefore, future studies efforts could evaluate the behavioral expectations of both respondents and their real actions to enhance comprehension of the relationship between the two and to create more meaningful functional consequences for ecotourism operators.

Conflict of Interest

The authors declare that they have no conflict of interest.

References

[1] B.B. Boley and G.T. Green, Ecotourism and natural resource conservation: The "potential" for a sustainable symbiotic relationship, *Journal of Ecotourism*,**15**, 36-50, (2016).

[2] J. Åhsberg, *Ecotourism in a developing island destination:A field study of bali*, Bachelor thesis, School of Business and Economics, Sweden, (2020).

[3] J. Chua and O.B. Ayoko, Employees' self-determined motivation, transformational leadership and work engagement, *Journal of Management & Organization*,**27**, 1-21, (2019).

[4] S. Clayton and G. Myers, *Conservation psychology: Understanding and promoting human care for nature*, Wiley-Blackwell, London UK, (2015).

[5] P. Björk, Ecotourism from a conceptual perspective, an extended definition of a unique tourism form, *International journal of tourism research*,**2**, 189-202, (2000).

[6] C. Gurău and L.P. Dana, Environmentally-driven community entrepreneurship: Mapping the link between natural environment, local community and entrepreneurship, *Technological Forecasting and Social Change*,**129**, 221-231, (2018).

[7] J.K. Fatima, H.Z. Khan and A.K. Halabi, Ecotourism participation intention in australia: Mediating influence of social interactions, *Tourism Analysis*,**22**, 85-91, (2017).

[8] M. Das and B. Chatterjee, Ecotourism: A panacea or a predicament?, *Tourism Management Perspectives*,**14**, 3-16, (2015).

[9] R. Fletcher, Nature is a nice place to save but i wouldn't want to live there: Environmental education and the ecotourist gaze, *Environmental Education Research*,**21**, 338-350, (2015).
[10] T. Handriana and R. Ambara, Responsible environmental behavior intention of travelers on ecotourism sites, *Tourism and hospitality management*,**22**, 135-150, (2016).
[11] M. Hultman, A. Kazeminia and V. Ghasemi, Intention to visit and willingness to pay premium for ecotourism: The impact of attitude, materialism, and motivation, *Journal of Business Research*,**68**, 1854-1861, (2015).
[12] K.D. Wagner, *Conservation in focus: Capturing the payments for ecosystem service (pes) scheme through ecotourism activities in laos*, Master thesis, York University,Toronto, Canada, (2017)
[13] R. Manzurova and R. Pashova, Environmentally responsible behavioral intention: A condition for competitiveness of the tourist enterprise empirical study in bulgaria, *Economics and Management*,**16**, 126-136, (2019).
[14] J.c.M. Romero, *Demand analysis for ecotourism products in the South Eastern region of Ecuador*, MCs thesis, University of Las Palmas de Gran Canaria, Spain, (2015)
[15] C. Lorenzo-Romero, M.D. Alarcón-del-Amo and J.A. Crespo-Jareño, Cross-cultural analysis of the ecological behavior of chilean and spanish ecotourists: A structural model, *Ecology and Society*,**24**, 38, (2019).
[16] B.T. Rutjens, S.J. Heine, R.M. Sutton and F. van Harreveld, Attitudes towards science, *Advances in Experimental Social Psychology*,**57**, 125-165, (2018).
[17] C.N.T. Khanh, Impact of environmental belief and nature-based destination image on ecotourism attitude, *Journal of Hospitality and Tourism Insights*,**3**, 489-505, (2020).
[18] C.A. Hunt, W.H. Durham, L. Driscoll and M. Honey, Can ecotourism deliver real economic, social, and environmental benefits? A study of the osa peninsula, costa rica, *Journal of Sustainable Tourism*,**23**, 339-357, (2015).
[19] D. Miller, B. Merrilees and A. Coghlan, Sustainable urban tourism: Understanding and developing visitor pro-environmental behaviours, *Journal of Sustainable Tourism*,**23**, 26-46, (2015).
[20] A. Kazeminia, M. Hultman and R. Mostaghel, Why pay more for sustainable services? The case of ecotourism, *Journal of Business Research*,**69**, 4992-4997, (2016).
[21] M. Ro, M. Brauer, K. Kuntz, R. Shukla and I. Bensch, Making cool choices for sustainability: Testing the effectiveness of a game-based approach to promoting pro-environmental behaviors, *Journal of Environmental Psychology*,**53**, 20-30, (2017).
[22] T. Suryanto, M. Haseeb and N.H. Hartani, The correlates of developing green supply chain management practices: Firms level analysis in malaysia, *International Journal of Supply Chain Management*,**7**, 316, (2018).
[23] F.D. Simões, Consumer behavior and sustainable development in china: The role of behavioral sciences in environmental policymaking, *Sustainability*,**8**, 897, (2016).
[24] I. Saatsakis, *Ecotourism: An environmental concern or a new diversification of the mass tourism market, the case of crete*, PhD thesis, Brunel University, UK, (2017).
[25] M. Alhalalmeh, R.A. Alkhawaldah, A. Mohammad, A. Al-Quran, G. Hijjawi and S. Al-Hawary, The effect of selected marketing activities and promotions on the consumers buying behavior, *Business: Theory and Practice*,**23**, 79-87, (2022).
[26] S. Al-Nawafah, H. Al-Shorman, F. Aityassine, F. Khrisat, M. Hunitie, A. Mohammad, and S. Al-Hawary, The effect of supply chain management through social media on competitiveness of the private hospitals in Jordan, *Uncertain Supply Chain Management*,**10**, 737-746, (2022).
[27] S. Al-Hawary and M. Al-Syasneh, Impact of dynamic strategic capabilities on strategic entrepreneurship in presence of outsourcing of five stars hotels in Jordan, *Business: Theory and Practice*,**21**, 578-587, (2020).
[28] A. Mohammad, M.S. Alshura, S. Al-Hawary, M. Al-Syasneh and T.M. Alhajri, The influence of Internal Marketing Practices on the employees' intention to leave: A study of the private hospitals in Jordan, *International Journal of Advanced Science and Technology*,**29**, 1174–1189, (2020).
[29] M. Alolayyan, S. Al-Hawary, A. Mohammad and B. Al-Nady, Banking Service Quality Provided by Commercial Banks and Customer Satisfaction. A structural Equation Modelling Approaches, *International Journal of Productivity and Quality Management*,**24**, 543–565, (2018).
[30] A. Comte, *The positive philosophy of Auguste Comte*, Calvin Blanchard, New York US, (1855).
[31] C.R. Kothari, *Research methodology: Methods and techniques*, New Age International, New Delhi India, (2004).
[32] J.F. Hair, W.C. Black, B.J. Babin and R.E. Anderson, *Multivariate data analysis a global perspective*, Pearson Education, New Jersey USA, (2010).
[33] E. Tariq, M. Alshurideh, I. Akour and S. Al-Hawary, The effect of digital marketing capabilities on organizational ambidexterity of the information technology sector, *International Journal of Data and Network Science*,**6**, 401-408, (2022).
[34] H. Al-Shormana, R. Alshawabkeh, F. Aldaihani, F. Aityassine, A. Mohammad and S. Al-Hawary, Drivers of E-training Intention to Use in the private universities in Jordan, *International Journal of Data and Network Science*,**5**, 831–836, (2021).
[35] S. Al-Hawary and T.M. Alhajri, Effect of Electronic Customer Relationship Management on Customers' Electronic Satisfaction of Communication Companies in Kuwait, *Calitatea*,**21**, 97-102, (2020).
[36] F. Aityassine, B. Aldiabat, S. Al-rjoub, F. Aldaihani, H. Al-Shorman and S. Al-Hawary, The mediating effect of just in time on the relationship between green supply chain management practices and performance in the manufacturing companies, *Uncertain Supply Chain Management*,**9**, 1081-1090, (2021).
[37] S. Al-Hawary, A. Mohammad, M. Al-Syasneh, M. Qandah and T.M. Alhajri, Organisational learning capabilities of the commercial banks in Jordan: do electronic human resources management practices matter?, *International Journal of Learning and Intellectual Capital*,**17**, 242-266, (2020).
[38] R.M. Groves, F.J. Fowler, M.P. Couper, J.M. Lepkowski, E. Singer and R. Tourangeau, *Survey methodology*, John Wiley & Sons, Canada, (2011).
[39] E.L. Slattery, C.C. Voelker, B. Nussenbaum, J.T. Rich, R.C. Paniello and Neely, A practical guide to surveys and questionnaires, *Otolaryngology-Head and Neck Surgery*,**144**, 831-837, (2011).

[40] R. Al-khawaldah, W. Al-zoubi, S. Alshaer, M. Almarshad, F. ALShalabi, M. Altahrawi and S. Al-hawary, Green supply chain management and competitive advantage: The mediating role of organizational ambidexterity, *Uncertain Supply Chain Management*,**10**, 961-972, (2022).
[41] M. Al-Alwan, D. Bader, M. Al-Qatawneh, S. Alneimat and S. Al-Hawary, E-HRM and employee flexibility in Islamic banks in Jordan, *International Journal of Data and Network Science*,**6**, 703-710, (2022).
[42] J.F. Hair, C.M. Ringle and M. Sarstedt, Pls-sem: Indeed a silver bullet, *Journal of Marketing theory and Practice*,**19**, 139-152, (2011).
[43] J.F. Hair, G. Hult, C. Ringle and M. Sarstedt, *A primer on partial least squares structural equation modeling (pls-sem)*, Sage Publications, USA, (2016).
[44] L.M. Connelly, Ethical considerations in research studies, *Medsurg Nursing*,**23**, 54, (2014).
[45] J.F. Hair, M. Sarstedt, L. Hopkins and V.G. Kuppelwieser, Partial least squares structural equation modeling (pls-sem) an emerging tool in business research, *European Business Review*,**26**, 106–121, (2014).
[46] S. Shen, A. Schüttemeyer and B. Braun, Visitors' Intention to Visit World Cultural Heritage Sites: An Empirical Study of Suzhou, China, *Journal of Travel & Tourism Marketing*,**26**, 722-734, (2009)
[47] C. Fornell and D.F. Larcker, Structural equation models with unobservable variables and measurement error: Algebra and statistics, *Journal of marketing research*,**18**, 382-388, (1981).
[48] W.L. Shiau, M. Sarstedt and J.F. Hair, Internet research using partial least squares structural equation modeling (pls-sem), *Internet Research*,**29**, 398-406, (2019).
[49] J. Henseler, G. Hubona and P.A. Ray, Using pls path modeling in new technology research: Updated guidelines, *Industrial Management & Data Systems*,**116**, 2-20, (2016).
[50] M. Das and B. Chatterjee, Tourism management perspectives, *Tourism Management*,**14**, 3-16, (2015).
[51] A.C. Lu, D. Gursoy and G. Del Chiappa, The influence of materialism on ecotourism attitudes and behaviors, *Journal of Travel Research*,**55**, 176-189, (2016).
[52] Y.C. Huang and C.H. Liu, Moderating and mediating roles of environmental concern and ecotourism experience for revisit intention, *International Journal of Contemporary Hospitality Management*,**29**, 1854-1872, (2017).
[53] N. Onel and A. Mukherjee, Consumer knowledge in pro-environmental behavior: An exploration of its antecedents and consequences, *World Journal of Science, Technology and Sustainable Development*, **13**, 328-352, (2016).
[54] I. Ajzen, M. Fishbein and R.L. Heilbroner, *Understanding attitudes and predicting social behavior*, Prentice-hall Englewood Cliffs, NJ, (1980).
[55] C.H. Hsu and S. Huang, An extension of the theory of planned behavior model for tourists, *Journal of Hospitality & Tourism Research*,**36**, 390-417, (2012).
[56] G.D. Moody and M. Siponen, Using the theory of interpersonal behavior to explain non-work-related personal use of the internet at work, *Information & Management*,**50**, 322-335, (2013).
[57] T. Stalder, C. Kirschbaum, B.M. Kudielka, E.K. Adam, J.C. Pruessner, J. C., Wüst, S. Dockray, N. Smyth, P. Evans, D.H.Hellhammer, R. Miller, M.A. Wetherell, S.J. Lupien and A. Clow, Assessment of the cortisol awakening response: Expert consensus guidelines, *Psychoneuroendocrinology*,**63**, 414-432, (2016).
[58] H. Hwang, *Similarities and differences in math-related motivation and intention to pursue math in the future: A cross-national study in the united states and south korea*, PhD thesis, University of North Carolina at Chapel Hill Graduate School, USA, (2016).