

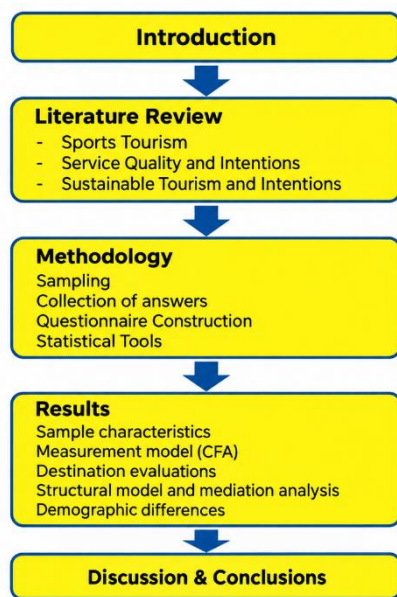
University Students' behavior towards service quality provided in water sports tourism sustainable destinations

Nikolaos Papadopoulos^{1,*}, Georgios Tsekouropoulos¹

1. Department of Organization Management, Marketing & Tourism, International Hellenic University,
PO Box 141 GR, 17 Km Thessaloniki - Sindos, 57400 Thessaloniki, Greece

*For correspondence - Email: nikospapadopoulos@ihu.gr

Graphical abstract



Abstract

The aim of the present study is to investigate the attitudes and behaviors of university students in Northern Greece regarding their vacations in Greece in the summer of 2024. Their vacations concerned water sports tourism destinations and the “sun and sea” product, examining their experiences through the evaluation of destination service quality, environmental sustainability, destination affective image and revisit intentions. The research examines the opinions and behaviors of young people in Greece who decided to spend their summer holidays in the country where they reside, enjoying the sun and sea as traditional elements of Greece as a summer tourist destination. The students evaluated the services provided, along with environmental practices, and whether they intended to revisit the same tourist destination. The study examined the relationships between perceived destination service quality, environmental sustainability, destination affective image and revisit intentions. The survey included 679 students from five Universities in Northern Greece. Based on quantitative research using a structured questionnaire and structural equation modelling, accommodation, local transport, cleanliness and activities had significant positive effects on destination affective image, while activities, hospitality and cleanliness had significant direct effects on revisit intentions. Environmental Sustainability did not significantly affect destination affective image or revisit intentions, while destination affective image did not mediate the relationships with revisit intentions. Practical implications for tourism executives are proposed.

Keywords tourist destination, sports tourism, environmental sustainability, service quality, revisit intentions

1. Introduction

Tourism is an important driving force for the development of the national economy and has become a key indicator reflecting the structure of a state national economy (Luo, & Wu, 2023). The hospitality industry has witnessed significant advancements due to their highly seasonal product of sun-and-sea as well as their ‘could be anywhere’ sun-and-sea image that is highly substitutable (Koutra & Karyopouli, 2013). Coastal tourism, usually referred to as sun and sea tourism, has historically been what managers and marketers in the sector pursue the most, and even today it is one of the biggest drivers of visitor flow (Castillo-Canalejo et al. 2023). Sun and beach destinations

are still attractive to the world, however, what it could be considered is the tendency of tourists to be more friendly to the environment, to seek experiences with local people, the quality of service (Ruiz Palacios et al. 2021); the distance from mass tourism, to have positive experiences of local transport, the cleanliness of the destination, the possibility of accessing health services, shopping, sports and cultural facilities, in order to spend a wonderful holiday. A better quality of service brings with it a more positive purchasing experience. Service quality and image components are significant in terms of destination assessments of tourists (Tosun et al. 2015).

The Greek tourism product is an amalgam of natural, cultural and heritage attractions spread throughout the country, as well as a wide variety of services offered and moreover, 15,000 miles of coastline; 2500 islands; an average of 300 sunny days annually. The Greek civilization of more than 3500 years also provides plentiful cultural heritage throughout the country. Some 25,000 registered and protected monuments and archaeological sites, numerous museums and about 500 characteristic traditional settlements' offer a unique blend of tourist attractions (Belias et al. 2018). Generational change is one such occurrence, rendering both opportunities and challenges for sports tourism destinations (Robinson & Schänzel, 2019). In Greece, the absence of a national inventory is particularly notable when it comes to documenting social, environmental, economic, and sustainable development actions (Tsitskari et al. 2025).

Undergraduate university students are approximately 18 to 25 years old. They belong to Generation Z, often referred to as Gen Z, as a demographic cohort following Millennials and typically include individuals born between the late 1990s and the early 2010s. To increase the attractiveness of tourism, business owners need to turn to millennials and use the tools the technology may provide in order to cope with the digital development of the era (Chatzigeorgiou, 2017). The age group 18–25 years old is specific to people at the beginning of their adult life. This generation is important because their habits, including those related to touristic preferences, can influence future generations too (Puiu et al. 2022). There are a few essential elements that individualize the consumer behaviour of undergraduate university students in connection with the means for obtaining information and booking tourist services, the frequency of consuming tourism activities and also some essential characteristics of their tourist practices (Baltescu, 2019). The majority of Students prefers a more tactful approach to combat climate change, opting for peaceful protests and environmental initiatives instead of breaking the law or cancelling brands. Today's students of Gen Z are generally not teamwork-oriented and prefers working alone to demonstrate their abilities and achieve greater efficiency (Surugiu et al. 2025).

The present study aims to investigate the relationships between the determinants of behavior of tourists who wish to have a "sun and sea" vacation, especially for Greeks Students, who are interested in contributing and participating on summer water sports. The study does not deal with winter sports tourism or city tourism (Bichler & Pikkemaat, 2021). The purpose of this study stems from the desire to deepen aspects related to sports tourism, environment, according to the factors that influence tourist behavior. The analysis of the behavior of young people having travel experiences in Greece, a country that has a long tradition in summer tourism. An analysis is made of the degree to which there is a relationship between the factors that influence consumer behavior, identified by the field research, which could determine the accommodation experiences of sports tourists and which have a direct impact on repeat purchase intentions. Taking into account previous research works, the purpose of the present study is given by the novelty of conducting an analysis of the link between sports tourism destination services and the factors that determine behavioral intentions among young Greek Students. Students were chosen to be studied because the tourists of this generation are the tourists of tomorrow who will have financial resources and will be able to make decisions regarding summer sports behavior related to tourism (Butnaru, et al. 2022). This paper is structured as follows. First, a background is presented about experience tourist sustainable destination, sports tourism, service quality and revisit intentions along with the scope of this paper. Current efforts to systematize the relationship between sustainable tourism and summer vacation are an important starting point for this work. Moreover, research questions are developed, and the methodology of the research is elaborated. Finally, the findings are presented and discussed, and future research ways are proposed, followed by practical implications.

2. Literature Review

2.1 Sports Tourism

The World Tourism Organization (UNWTO) defines sports tourism as a type of tourist activity relating to the travel experience of a tourist who either observes as a spectator or takes an active part in a sporting event, which usually involves commercial and non-commercial activities of a competitive nature (UNWTO, 2019). Experts predict that the global market of water sports tourism is expected to reach almost \$ 850 billion by 2032, with an average annual growth of almost 17% over the next 10 years (Kolotukha et al. 2023).

Sports tourism is one of the individualized tourism (Chaigasem, & Leruksa, 2020). Sport contributes to the construction of a country's brand and provides a unique advantage (Happ, 2021). Studies have demonstrated that infrastructure, management, economic factors, competitive advantage, environmental and cultural factors determined their role in developing sports tourism (Boroujerdi et al. 2023), although other authors consider categories like social, cultural, organizational, logistic, communication, economic, tourism, and environmental

(Chersulich Tomino et al. 2020). Sport tourism refers to ‘a leisure-based travel that takes individuals temporality outside their home communities to participate and watch sport activities as well as visit sport attractions’ (Chang et al. 2020). It can be classified into three categories, which are event sport tourism, active sport tourism, and nostalgia sport tourism. Event sport tourism refers to large-scale sporting events such as the Olympic Games, the Super Bowl, and the FIFA World Cup (Gholipour et al. 2020; Hinch & Ito, 2018). There is a view that hosting major international sporting events will enhance the destination's image and bring economic benefits (Cheung et al. 2017). A small-scale sports event portfolio consistent with a community's infrastructure and human and cultural capital may be a viable form of sustainable tourism development (Gibson et al. 2012). Active sport tourism refers to travel to join sport related activities. Active sport tourism was associated with participating in sport while on holiday/vacation.

A key difference between the two forms of tourism was in the behavior of physically taking part as an ‘athlete’ or watching as a ‘fan’. (Gibson et al. 2018). A wide variety of sport activities are offered, such as golf, hiking, tennis, cycling, diving and ice-skating. Nostalgia sport tourism attracts travellers to visit well-known sport halls and sites. It is not uncommon to measure the success of tourism on a destination by visitation numbers and showing increases year-after-year. Tourism needs to be planned and managed effectively if it is to be a success (Hritz & Cecil, 2019). Tourists' expectations dictate supply to a supply-driven model, where local communities define and manage their own resources autonomously and in a sustainable way (Miedes-Ugarte & Flores-Ruiz, 2024).

Sport and non-sport tourists possess both similar and dissimilar perspectives (Chen & Funk, 2010). For the sport tourism product to be regarded as a memorable and satisfying experience, the consumer needs to be highly involved within the experience. The experience needs to be an emotive one that captivates the consumer (Harrison-Hill & Chalip, 2013). Ito & Higham, (2020), presented four categories of sport tourism attractions, spectator-based events, participation-based events, active sports and heritage sports. The increase in individual sports activities is stimulating the rise of sport-related forms of vacationing. This is further intensified by tourists seeking authentic experiences in host–guest relations, physical health and well-being, and the consumption of local products and services (Herbold et al. 2020).

When consumers use social media technology-assisted service encounters for hotels and airlines' services they are most likely to experience control / chaos, freedom / enslavement, competence / incompetence, efficiency / inefficiency, engaging / disengaging, assimilation / isolation paradoxes and least likely to experience the new / obsolete paradox (Christou & Chatzigeorgiou, 2020). Building awareness, loyalty and involvement reduce brand confusion (Christou, 2013). It was also established that trust in a travel social media brand is positively influencing brand loyalty (Christou, 2015).

Significant differences reveal between national and international event participants in terms of their socio-demographic profiles, consumption behaviours, and event motivations. Active sport tourists who travelled internationally to take part in the event were more committed to experiencing and pursuing the event's heritage, as active participants as well as passive spectators (Derom & Ramshaw, 2018).

Tourism Destination Image (TDI) has expressions such as “travel shape,” “travel mood,” “destination shape,” and “destination image” (Li, 2023). Factors, including tourism and public infrastructure, local customs and traditions, local attractions, service quality, entertainment and sports events, natural and environmental factors, information and advertising, and social and security factors, are the influenced factors that can significantly shape visitors' attitudes towards a particular destination (Emami et al. 2023).

2.2 Service Quality and Intentions

Service quality was defined as a global judgment or attitude relating to the superiority of a service (Zeithaml & Bitner, 2003). Revisit intention describes a tourist's willingness to visit a destination again (Jeong & Kim, 2020). Customer revisit intention has a positive effect on long-term firms' profitability (Chen & Funk, 2010). The tourist services that a tourist destination can offer are: accommodation, hospitality, activity services, perceptions related to language, local transport and other components related to the natural landscape (Jeong et al. 2019). The impact of service quality on tourists' behavioral intentions, such as visit, recommendation, and revisit intentions, toward a given destination remains a prevalent topic in the tourism literature (Duan & Wu, 2024). Many scholars have established that perceived service quality is a major predictor of customers' behavioral intentions across a variety of tourism industry. Service quality plays an important role in tourism by increasing the level of tourist satisfaction by enhancing destination facilitates, destination accessibility and destination attractions (Al-Ababneh, 2013). Trip quality leads to satisfaction, which mediates the relationship with intent to return (Choi et al. 2016).

In particular, sport tourists' intentions to revisit a destination as non-sport visitors represent the potential long-term economic impact of sport events on destination development. However; studies primarily confirmed the positive impact of tourism destination on revisit intention (Duan & Wu, 2024). A literature review suggested the power of combined tourism destination to predict tourists' behavioral intentions and called for more studies to comprehensively examine tourism destination's influence on tourists' behaviors (Hemmonsbeay & Tichaawa, 2020).

Tosun et al (2015) examined the moderating role of past experience on the relationship between destination service quality, destination affective image and re-visit intention. The study population comprises of 539 survey responses from foreign tourists, in Turkey. The study's findings, perceptions related to language, accommodation, hospitality and activity services were found to have a positive and significant effect on the perception of the destination's affective image. Evidence from the study suggested that accommodation - based service - quality perceptions on destination affective image, and destination affective image perceptions on revisit intention, provide a more robust determinant for re-peat visitors to the destination than for first - time visitors. Accommodation services positively affected the destination affective image perceptions of repeat tourists. Service quality is related to revisit intentions both directly and through tourists' evaluations of the destination. Destination affective image can also function as an intermediate factor linking service experience with future behavioral intentions.

Chan et al (2015) proposed and tested a tour service performance framework that assessed the impact of tour service performance on tourists' behavioral intentions with tour services and experience, based on data collected from 580 Chinese tourists participating in package tours in Hong Kong. Among seven tour services examined, tour guiding service has the greatest impact on intention with tour services, whereas leisure activities have the greatest impact on intention with the tour experience. Service performance can influence behavioral intentions directly, while evaluations of the tourist experience can also intervene in the relationship (Choi et al., 2016). Huang et al (2015) showed that cognitive interpretation outcome has a greater impact on tourist satisfaction and sustaining visitor arrivals than affective interpretation outcome, whereas satisfaction with the guided tour experience directly affects behavioral intention and largely mediates the effect of cognitive interpretation outcome on behavioral intention.

Ardani et al (2019) presented Behavioral intentions can be seen when a customer decides to remain with or defect from the company. Meanwhile, the consequences are mainly characterized by the intention to return, willingness to recommend, and spread positive word of mouth. Haji et al (2021) examined and determined the effect of experience quality on tourists' behavioral intention either directly or by perceived value, happiness, and tourist satisfaction, that Experience Quality, Tourist Satisfaction, and Happiness had positive and significant effects on Tourists' Behavior Intention. A relationship between the quality of the tourism experience and subsequent behavioral intentions is supported, although the mechanisms involved are not always the same.

Correia et al (2013) demonstrated that all the factors present high loading values competing to explain overall satisfaction and behaviour. Akinci et al (2018) examined the relationship among expectation, perception, and satisfaction of the undergraduate students receiving tourism education at the tertiary level. It was found that the perception had a partial mediating role between expectation and satisfaction in education. The students whose expectations were met had a positive perception and that their tourism education satisfaction levels were higher.

2.3 Sustainable Tourism and Intentions

The preservation of biodiversity and cultural assets can be achieved through sustainable tourism, which aims to create a symbiotic relationship between environmental, socio-cultural, and economic aspects of a location (Dibiku, 2023). Liu et al (2015) conceptualized sustainable tourism as a future trend in tourism and argued that although sustainable tourism and satisfaction frequently function as a means of tourist evaluation and experience for attractions, their social significance extends far beyond current tourism planning. Ma et al. (2025) stated that the growth of tourist infrastructure directly escalates energy consumption, consequently driving up carbon emissions. A significant number of studies have investigated the relationship between sustainable tourism and tourists' behavioral intentions, although evidence concerning the direction and strength of the relationship is not uniform. Bazneshin et al (2015) evaluated the effective indexes and criteria by recognizing the effective variables on tourist's intentions with the recreation services in Iran. The results showed, among aspects of tourists' satisfaction, nature have the greatest impact on clients' intentions. Stable tourism is referred to tourism that manages all of the resources, in a way that maintains environmental processes, environmental diversity, and life support systems while respecting cultural values. Asmelash & Kumar (2019) reported similar findings in the context of sustainable heritage tourism.

Findings vary considerably across tourism settings and sustainability dimensions. Sitepu et al (2020) presented, out of the seven variables affecting the revisit intention, there were two statistically insignificant variables, such as economic aspect and socio-cultural aspects variables. There are two variables that negatively affect the revisit intention namely the management aspect variables and environmental aspects and both statistically have a significant influence. Sörensson and Friedrichs (2013) found that national tourists rated the environmental sustainability of their holiday destination more highly than international tourists, indicating that responses to sustainability may vary according to the characteristics of the tourist group.

Camargo & Gretzel (2017) tried to explore students' knowledge of and attitudes toward sustainable tourism as well as their sense of competence and empowerment to make sustainability-related decisions. The focus was on Latin America, where tourism has caused severe negative impacts and where sustainability knowledge and skills are most needed to protect fragile natural and cultural resources. Results showed that although most tourism students considered sustainable tourism important, they had limited knowledge of sustainability principles and

technical aspects, suggesting that positive attitudes toward sustainable tourism do not necessarily translate into detailed knowledge or incorporation into tourism decisions. Su et al (2018) investigated how the perceived reputation of a destination impacts the environmentally responsible behavior and subjective well-being of tourists through satisfaction and identification with a destination. They suggested that enhancing perceptions of a destination's reputation is an important step in increasing tourists' subjective well-being and strengthening their engagement in environmentally responsible behavior. Cristobal-Fransi et al (2020) provided a useful introduction to the relationship between tourism and sustainable marketing management that can be used by researchers and practitioners to develop tourism marketing strategies from a sustainable perspective.

Cardinali et al (2020) explored the relationship between attitudes towards sustainable tourism, preference for a sustainable stay, values orientation, and psychological need satisfaction in Italian adults, testing the hypothesis that also basic needs satisfaction and tourist preferences should contribute to increasing a positive attitude toward sustainable tourism. They found that more attention might be needed to psychological needs to understand how people might deal with environmental sustainability. Bašan et al. 2021 proved that Sustainable destination policy does not significantly influence any perceived cultural tourism effects. In contrast, the perceived socio-cultural and economic effects have a positive influence on tourist satisfaction.

Palacios-Florencio et al (2021) showed how the development of Sustainable Tourism can help in the sustenance of the tourism industry, since one of the premises on which Sustainable Tourism is based is the non-overcrowding of tourist destinations in a research of 308 tourists has determined how factors related to the tourists' attitude, motivation and perceived benefits provided by the development of Sustainable Tourism increase the intention to consume this type of tourism. De Marchi et al (2022) showed that the Tourism Sustainability Index could provide a scalable and geo referenced evaluation of tourism sustainability, measured according to the European Tourism Indicator System criteria and complementing them. The Tourism Sustainability Index could be a consistent and valid tool for tourist destinations to use in analyzing sustainability, monitoring the evolution of sustainability through time periods and subareas, and comparing the findings with those of other benchmarks and/or other competitive areas. Zulvianti et al (2022), in a survey with 690 respondents who visited halal tourism destinations in West Sumatra, indicated environmental factors (perceived environmental values) and non-environmental factors (halal-friendly destination performance, sustainable tourism development, and halal destination image) influenced tourist satisfaction and intention.

Di Vaio et al (2022) analysed cruise tourists' sustainable behaviour and their level of satisfaction at destinations. A sample included of 1180 cruise tourists in the Mediterranean region. The findings highlighted that there was a significant sensitivity of cruise passengers towards the quality of all services - and all physical conditions - provided by the destination; cruise tourists paid more attention to the environmental dimension. Trišić et al (2024) with a total of 840 participants included of a survey indicated that sustainable tourism significantly affected the satisfaction and intention. Kurian, (2023) examined the factors destination image, tourist satisfaction, and tourism loyalty. It was proved that a positive destination image, ensuring tourist satisfaction, and fostering tourism loyalty collectively created a framework for sustainable tourism that benefited both the destination and its stakeholders. Zakiah et al (2023) showed that tourist groups who have personal value preferences on sustainability had a loyal attitude towards service providers and were willing to advocate for efforts to ensure sustainability if possible facilitated by the provider. Baghirov et al (2023) examined the influence of personal factors, including environmental concern, cultural interest, travel lifestyle and involvement, on tourist satisfaction and revisit intention, that cultural interest positively affected tourists' attitudes toward slow tourism, perceived behavioral control and satisfaction. Jasrotia et al (2023) suggested a positive relationship of three environmental, sociocultural, and institutional sustainability dimensions on tourist satisfaction. In another study (Jawabreh et al, 2023), it was showed that economic viability, employment quality, and local prosperity have a significant positive effect on tourist satisfaction. Environmental sustainability was found to have no significant direct effect on tourist satisfaction, but it moderated the relationship between economic viability and tourist satisfaction and between local prosperity and tourist satisfaction.

The literature provides extensive evidence that destination experience based on service quality perceptions is related to tourists' behavioral intentions. Previous studies also indicate that service quality may contribute to destination affective image, while destination affective image may in turn be associated with revisit intentions. Evidence concerning sustainable tourism is less consistent. Positive relationships with satisfaction and behavioral intentions have been reported in different tourism settings, whereas other studies have found weak, non-significant, or context-dependent relationships. The connection appears to be particularly unclear among younger tourists, for whom favorable attitudes toward sustainability may not always translate into tourism decisions (Cárdenas et al. 2015; Prayag et al. 2018; Asmelash & Kumar, 2019; Camargo & Gretzel, 2017). Service quality, environmental sustainability, destination affective image, and revisit intentions therefore require examination within the same analytical framework rather than separately. The aim of this study was, therefore, to examine the relationships between destination service quality, environmental sustainability, destination affective image, and revisit intentions among domestic university students from five universities in Northern Greece who had visited sun-and-sea water sports destinations. Demographic differences in destination affective image and revisit

intentions were also examined according to gender, employment status, monthly family income, monthly personal income, and type of water sport.

3. Methodology

3.1 Sampling

The survey was conducted in electronic format using a questionnaire as a tool, which was constructed with the aim of collecting data on the investigation of the level of knowledge, opinions and intentions of students from the five Universities of Northern Greece (Aristotle University of Thessaloniki, International Hellenic University, Democritus University of Thrace, University of Western Macedonia, University of Macedonia) regarding their experience of the summer sports tourist destinations offered by the tourist product "Sun and Sea". This is a structured questionnaire that resulted from a review of the literature. The study population was the students of the five Greek public universities and amounts to 109,241 population units (Hellenic Authority for Higher Education, 2023). Quota sampling was applied to collect proportional data. The distribution of the population by gender and university of study was used to calculate the quota. The final sample after controlling for university and gender amounts to 679 cases.

3.2 Collection of answers

The research was conducted in October 2024. This process was carried out using social media as a means of promoting the questionnaire. The questionnaire was promoted to the student groups on social media, sending a relevant text along with it. The questionnaire was converted into electronic form with the help of Google Form. The choice of creating a questionnaire in electronic form for the research was made because this method is more effective for conducting the research, as it requires less time and is more economical. The electronic questionnaire presents certain advantages, which are the rapid collection and storage of data, access to geographically distributed populations, the participation of individuals with deviant behaviors due to the anonymity that prevails on the internet and the elimination of errors during data entry, while the entry is done by the respondents themselves. Another advantage of the electronic questionnaire is the ease of statistical analysis, since there is the possibility of directly importing them into statistical software such as SPSS.

3.3 Questionnaire Construction

To construct the questionnaire, secondary data were investigated and searched for, through a literature review, and in addition to the data examined regarding the topic under investigation, the questionnaire consists of a section with questions regarding demographic data. To measure Accommodation (ACC), Local Transport (LT), Cleanliness (CL), Hospitality (H), Activities (AT), Destination Affective Image (DAI), and Revisit Intentions (RVI), the Destination Quality Model adapted from Tosun, Dedeoğlu, and Fyall (2015) was used. Together with the Environmental Sustainability (ES) scale, the initial questionnaire comprised 39 items across the eight constructs. Accommodation was measured using five examined items such as "Speed of check-in and check-out at accommodation" and "Level of services at accommodation". Local Transport was measured by four items like "Network (accessibility) of local transport services" and "Comfort of local transport services". Cleanliness was measured by five items such as "Overall cleanliness of the destination" and "Cleanliness of beaches". Hospitality was measured by five items such as "Attitude of staff in tourism overall" and "Attitude of local people". Activities were measured using six items such as "Availability of shopping facilities" and "Suitability of entertainment", while Destination Affective Image was measured by four items like "My vacation was exciting" and "My vacation relaxed me". Finally, Revisit Intentions were measured by five items such as "I would like to visit this destination again in the near future" and "This destination will be my first choice over other destinations". Environmental Sustainability (ES) dimension, from Dibiku (2023), was assessed by five examined items such as "Integration of tourism and the environment" and "Efforts made to minimize damages on the environment".

The answers for the measurements of the factors were given on a five-point Likert attitude scale, where 1 corresponded to "strongly disagree" and 5 corresponded to "strongly agree". The questionnaire also includes one question on the type of Water Sports and five demographic questions, such as Gender, University of attendance, Monthly family income, Monthly personal income and whether or not students are employed.

3.4 Statistical Tools

Confirmatory factor analysis (CFA) was performed to evaluate the measurement structure of the eight constructs. Parameters were estimated by maximum likelihood. Measurement quality was assessed from the standardized factor loadings (λ), Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). Standardized loadings of .50 or higher were regarded as preferable, although values between .40 and .50 were retained when the item remained theoretically relevant and construct reliability was satisfactory (Hair et al., 2019). Cronbach's alpha and CR values of .70 or above were taken to indicate acceptable internal consistency and composite reliability, respectively (Nunnally & Bernstein, 1994). Convergent validity was assessed through AVE, with .50 used as the conventional threshold (Fornell & Larcker, 1981). Discriminant validity was examined with

the heterotrait–monotrait ratio (HTMT), applying the more conservative .85 criterion (Henseler et al., 2015; Voorhees et al., 2016).

Structural equation modelling (SEM) was employed to estimate the relationships among the latent constructs (Kline, 2016). ACC, LT, CL, H, AT, and ES were specified as predictors of DAI and RVI, while DAI was also linked to RVI. Correlations among the exogenous constructs were freely estimated. Overall fit was evaluated through several indices, including χ^2 , χ^2/df , CFI, TLI, RMSEA, and SRMR, since reliance on a single fit statistic is not recommended in covariance-based modelling (Hu & Bentler, 1999; Kline, 2016). CFI and TLI values of .90 or higher and RMSEA and SRMR values of .08 or lower were used as indicators of acceptable fit (Hair et al., 2019). More stringent values, particularly CFI and TLI close to .95, RMSEA close to .06, and SRMR below .08, were regarded as evidence of a closer fit (Hu & Bentler, 1999). Structural relationships were evaluated from the standardized path coefficients (β), their 95% confidence intervals and p-values, while R^2 was used to indicate the proportion of variance explained in the endogenous constructs (Kline, 2016).

DAI was examined as a potential mediator between the six destination-related factors and RVI. Direct, indirect, and total standardized effects were estimated. Following Preacher and Selig (2012), confidence intervals for the indirect and total effects were obtained from 20,000 Monte Carlo draws based on the estimated parameter covariance matrix. Mediation was considered present when the 95% confidence interval for the indirect effect did not include zero.

Group differences in DAI and RVI were examined separately. Gender and employment were analysed with independent-samples t-tests, whereas one-way ANOVA was applied to monthly family income, monthly personal income, and type of water sport. Effect sizes accompanied the significance tests, using Cohen's d for two-group comparisons and eta squared (η^2) for ANOVA (Cohen, 1988). Responses recorded as "I do not know" or "I do not answer" were omitted from the corresponding income analyses.

4. Results

4.1 Sample characteristics

The research sample consists of 679 individuals (Table 1), of whom 57.9% are women and 42.1% are men. Regarding the university of study, the largest percentage of participants comes from the Aristotle University of Thessaloniki (34.5%), while significant percentages are held by the International Hellenic University (21.4%) and the Democritus University of Thrace (19.6%). They are followed by the University of Western Macedonia (15.6%) and the University of Macedonia (9.0%). Regarding monthly family income, 25.2% of students come from families with an income between €1,801 and €2,400, while 21.1% declare an income of €1,201 – €1,800 and 17.7% an income of €601 – €1,200. 19.4% report an income of over €2,400; while a small percentage (2.8%) report less than €600. In addition, 7.1% do not know their family income and 6.8% chose not to answer. Regarding the personal income of students, 26.5% declare an income of €601 – €900, 22.8% less than €300, 21.9% over €900, and 15.8% between €301 and €600. A percentage of 13.0% chose not to answer. The majority of students work (65.2%), while 34.8% declare that they do not work. The high employment rate may be related to the need to cover personal or family expenses. Finally, regarding the type of water sports during the holidays, the most frequent choice is Canoeing (29.3%), followed by Jet skiing (16.2%) and Windsurfing (15.2%). 14.3% choose Scuba Diving, 13.0% Snorkeling, and 7.8% prefer Waterskiing. Paragliding is chosen by 3.7% of the sample and a small percentage of 0.6% mention another type of water sports.

Table 1. Demographics

		N	%
Gender	Male	286	42.1%
	Female	393	57.9%
Universities	IHU	145	21.4%
	AUTH	234	34.5%
	UOM	61	9.0%
	DUTH	133	19.6%
	UOWM	106	15.6%
Monthly family income	< 600€	19	2.8%
	601€ - 1.200€	120	17.7%
	1.201€ – 1.800€	143	21.1%
	1.801€ – 2.400€	171	25.2%
	> 2.400€	132	19.4%
	I do not know	48	7.1%
	I do not answer	46	6.8%
Monthly personal income	< 300€	155	22.8%
	301€ - 600€	107	15.8%
	601€ – 900€	180	26.5%
	> 900€	149	21.9%
	I do not answer	88	13.0%
Employment	Yes	443	65.2%
	No	236	34.8%
Water Sports Type	Waterskiing	53	7.8%
	Windsurfing	103	15.2%
	Canoeing	199	29.3%
	Jet skiing	110	16.2%
	Scuba Diving	97	14.3%
	Snorkeling	88	13.0%
	Paragliding	25	3.7%
	Other	4	.6%

4.2 Measurement model

Confirmatory factor analysis was conducted before the structural relationships were estimated. The initial 39-item specification was reduced to 38 items after AT6 showed weak performance. The retained solution presented at Table 2, showed acceptable fit ($\chi^2 = 1764.519$, $df = 636$, $\chi^2/df = 2.774$, CFI = .917, TLI = .908, RMSEA = .051, SRMR = .053). Internal consistency was satisfactory across all constructs, with Cronbach's α ranging from .784 to .922 and composite reliability from .778 to .922. AVE exceeded .50 for six constructs. Lower values were obtained for Cleanliness (AVE = .486) and Activities (AVE = .429), although composite reliability remained satisfactory for both dimensions (CR = .822 and .778, respectively). HTMT values ranged from .037 to .592 and remained below the .85 criterion, supporting discriminant validity (Table 3).

Table 2. CFA loadings and reliability

Construct	Item	λ	Cronbach's α	CR	AVE
ACC	ACC1	.776	.836	.840	.517
	ACC2	.565			
	ACC3	.649			
	ACC4	.793			
	ACC5	.782			
LT	LT1	.680	.832	.838	.566
	LT2	.832			
	LT3	.805			
	LT4	.678			
CL	CL1	.736	.833	.822	.486
	CL2	.829			
	CL3	.748			
	CL4	.564			
	CL5	.567			
H	H1	.695	.855	.857	.547
	H2	.780			
	H3	.813			
	H4	.742			
	H5	.658			
AT	AT1	.553	.784	.778	.429
	AT2	.804			
	AT3	.863			
	AT4	.524			
	AT5	.420			
ES	ES1	.622	.878	.875	.592
	ES2	.922			
	ES3	.912			
	ES4	.741			
	ES5	.584			
DAI	DAI1	.856	.922	.922	.748
	DAI2	.899			
	DAI3	.848			
	DAI4	.855			
RVI	RVI1	.720	.887	.891	.623
	RVI2	.863			
	RVI3	.829			
	RVI4	.805			
	RVI5	.717			

Table 3. Discriminant validity: HTMT matrix

Construct	ACC	LT	CL	H	AT	ES	DAI	RVI
ACC	-							
LT	.558	-						
CL	.373	.214	-					
H	.416	.261	.428	-				
AT	.240	.268	.235	.337	-			
ES	.037	.052	.041	.067	.068	-		
DAI	.592	.539	.369	.383	.313	.039	-	
RVI	.294	.217	.284	.336	.412	.072	.302	-

4.3 Destination evaluations

As presented at Table 4, Accommodation dimension (ACC) scored an average of 3.66 (S.D. = .78), indicating a high degree of satisfaction with the quality, cleanliness, service and overall experience provided by the accommodations, while that of Local Transport (LT) recorded a lower average of 3.19 (S.D. = .85), indicating more neutral views or mildly positive attitudes regarding the accessibility, frequency and comfort of transport during the holidays. The Cleanliness dimension (CL) scored a high average of 3.65 (S.D. = .78), indicating a positive experience regarding cleanliness in public areas, beaches, restaurants and bars. Regarding Hospitality (H), the relative average is 3.74 (S.D. = .73), highlighting the positive climate that participants experienced from their contact with locals, catering staff and tourism industry professionals. The high average of Activities (AT) (M = 3.42, S.D. = .76), reflects satisfaction with the existence and quality of facilities for entertainment, health, shopping and sports, with Environmental Sustainability (ES), recording the lowest average (M = 3.17, S.D. = .87), an assessment that likely reflects concerns about the impacts of tourism on the natural environment or a lack of information about sustainability practices in destinations. The Destination Affective Image (DAI) ranks very high with an average of 3.72 (S.D. = .90), which confirms that the participants formed an overall positive, enjoyable and pleasant image of their holiday experience, while finally, regarding the Revisit Intention (RVI), the respondents show a strong, although not completely universal, tendency to return to the same destination (M = 3.52, S.D. = .90).

Table 4. Descriptive Statistics of Dimensions

	M	SD
ACC	3.66	.78
LT	3.19	.85
CL	3.65	.78
H	3.74	.73
AT	3.42	.76
ES	3.17	.87
DAI	3.72	.90
RVI	3.52	.90

4.4 Structural model and mediation analysis

The structural model provided an acceptable fit to the data ($\chi^2 = 1764.519$, $df = 636$, $\chi^2/df = 2.774$, CFI = .917, TLI = .908, RMSEA = .051, SRMR = .053). The model accounted for 47.1% of the variance in Destination Affective Image and 20.6% of the variance in Revisit Intentions (Table 5).

Table 5. Structural model fit indices

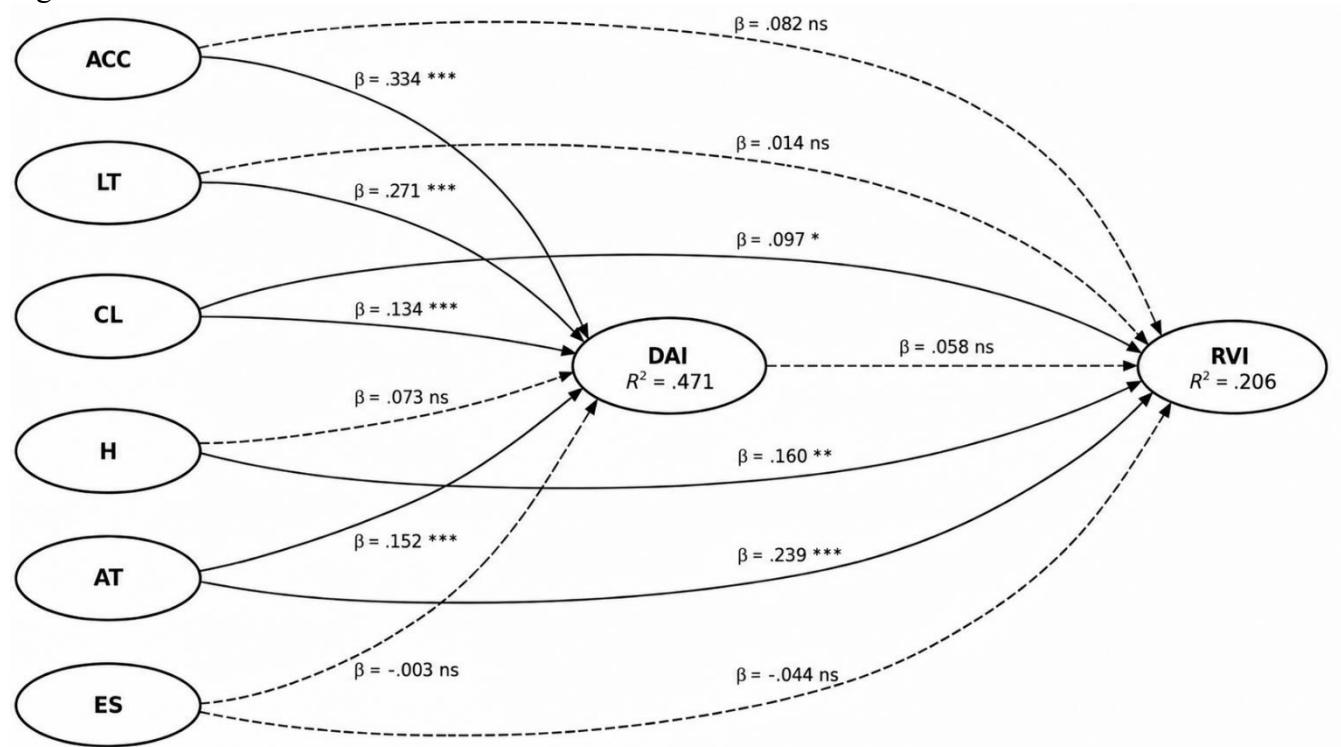
Fit index	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
Value	1764.519	636	2.774	.917	.908	.051	.053

Several destination-related factors were associated with DAI (Figure 1). Accommodation showed the strongest positive effect ($\beta = .334$, $p < .001$), followed by Local Transport ($\beta = .271$, $p < .001$), Activities ($\beta = .152$, $p < .001$), and Cleanliness ($\beta = .134$, $p < .001$). Hospitality did not reach statistical significance ($\beta = .073$, $p = .073$), while Environmental Sustainability had practically no effect on DAI ($\beta = -.003$, $p = .925$).

A different pattern emerged for Revisit Intentions. Activities had the strongest direct effect ($\beta = .239$, $p < .001$), followed by Hospitality ($\beta = .160$, $p = .001$) and Cleanliness ($\beta = .097$, $p = .042$). Accommodation ($\beta = .082$, $p =$

.167), Local Transport ($\beta = .014$, $p = .798$), and Environmental Sustainability ($\beta = -.044$, $p = .249$) were not statistically significant. The direct path from DAI to RVI was also non-significant ($\beta = .058$, $p = .307$).

Figure 1. SEM standardized results



As for the indirect effects through DAI, none reached statistical significance (Table 6). The indirect effect of ACC on RVI was $\beta = .019$ (95% CI [-.018, .058]), followed by LT ($\beta = .016$, 95% CI [-.014, .047]), AT ($\beta = .009$, 95% CI [-.008, .028]), CL ($\beta = .008$, 95% CI [-.007, .026]), and H ($\beta = .004$, 95% CI [-.004, .017]). The corresponding estimate for ES was close to zero ($\beta = -.000$, 95% CI [-.006, .005]). Since every confidence interval included zero, DAI did not mediate the relationship between any of the six destination-related factors and RVI.

Regarding total effects on RVI, the results are consistent with the direct-effect pattern observed in the structural model. Activities showed the strongest total effect ($\beta = .248$, 95% CI [.162, .330]), followed by Hospitality ($\beta = .164$, 95% CI [.069, .255]) and Cleanliness ($\beta = .104$, 95% CI [.012, .193]).

Table 6. Indirect and total effects on Revisit Intentions

Predictor	Indirect effect (β)	95% CI for indirect effect	Total effect (β)	95% CI for total effect
ACC	.019	[-.018, .058]	.101	[-.009, .207]
LT	.016	[-.014, .047]	.029	[-.070, .129]
CL	.008	[-.007, .026]	.104	[.012, .193]
H	.004	[-.004, .017]	.164	[.069, .255]
AT	.009	[-.008, .028]	.248	[.162, .330]
ES	-.000	[-.006, .005]	-.045	[-.119, .029]

4.5 Demographic differences

Demographic differences were examined separately for DAI (Table 7) and RVI (Table 8). Employment was the only characteristic associated with a statistically significant difference in DAI. Students who were not employed reported a higher mean score ($M = 3.92$, $SD = .84$) than employed students ($M = 3.61$, $SD = .92$), $t(677) = -4.262$, $p < .001$, Cohen's $d = -.343$. No significant differences in DAI were found for gender, monthly family income, monthly personal income, or type of water sport. Personal income produced the closest result to the .05 level, although the difference remained non-significant, $F(3, 587) = 2.574$, $p = .053$.

No demographic characteristic produced a statistically significant difference in RVI. Gender and employment were non-significant, while the ANOVA results for family income, personal income, and type of water sport also

remained above the .05 level. Family income was the closest to statistical significance, $F(4, 580) = 2.227$, $p = .065$.

Table 7. Destination Affective Image by demographic characteristics

Characteristic	Category	M (SD)	Test statistic	p	Effect size
Gender	Male	3.70 (.93)	$t(677) = -.532$	.595	$d = -.041$
	Female	3.73 (.89)			
Employment	Yes	3.61 (.92)	$t(677) = -4.262$	< .001	$d = -.343$
	No	3.92 (.84)			
Monthly family income	< €600	3.49 (1.07)	$F(4, 580) = 1.496$	.202	$\eta^2 = .010$
	€601–1,200	3.61 (.89)			
	€1,201–1,800	3.68 (.91)			
	€1,801–2,400	3.67 (.97)			
	> €2,400	3.85 (.84)			
Monthly personal income	< €300	3.86 (.87)	$F(3, 587) = 2.574$	.053	$\eta^2 = .013$
	€301–600	3.56 (1.04)			
	€601–900	3.68 (.86)			
	> €900	3.74 (.87)			
Water sports type	Waterskiing	3.82 (1.07)	$F(7, 671) = 1.393$	.205	$\eta^2 = .014$
	Windsurfing	3.82 (.94)			
	Canoeing	3.62 (.91)			
	Jet skiing	3.67 (.88)			
	Scuba diving	3.63 (.94)			
	Snorkeling	3.85 (.73)			
	Paragliding	3.93 (.82)			
	Other	4.12 (.85)			

Table 8. Revisit Intentions by demographic characteristics

Characteristic	Category	M (SD)	Test statistic	p	Effect size
Gender	Male	3.46 (.99)	$t(677) = -1.480$	.139	$d = -.115$
	Female	3.57 (.83)			
Employment	Yes	3.50 (.91)	$t(677) = -.921$	.357	$d = -.074$
	No	3.57 (.88)			
Monthly family income	< €600	3.47 (.92)	$F(4, 580) = 2.227$	.065	$\eta^2 = .015$
	€601–1,200	3.46 (.89)			
	€1,201–1,800	3.52 (.95)			
	€1,801–2,400	3.44 (.96)			
	> €2,400	3.73 (.77)			
Monthly personal income	< €300	3.55 (.84)	$F(3, 587) = .186$	.906	$\eta^2 = .001$
	€301–600	3.56 (.98)			
	€601–900	3.56 (.85)			
	> €900	3.49 (.96)			
Water sports type	Waterskiing	3.58 (1.03)	$F(7, 671) = 1.288$	.253	$\eta^2 = .013$
	Windsurfing	3.74 (.90)			
	Canoeing	3.51 (.83)			
	Jet skiing	3.39 (.91)			
	Scuba diving	3.52 (.90)			
	Snorkeling	3.46 (.93)			
	Paragliding	3.49 (.88)			
	Other	3.55 (.97)			

5. Discussion

The present study examines the relationships among destination service quality, Environmental Sustainability, Destination Affective Image, and Revisit Intentions in the context of sun-and-sea water sports tourism among university students in Northern Greece. The analysis focuses on how evaluations of destination services and environmental sustainability are associated with affective perceptions of the destination and intentions to revisit. Studies have yielded mixed results on both the measurement and influence of service quality on behavioral intentions (Tosun et al. 2015; Chan et al. 2015; Dolnicar et al. 2015; Ardani et al. 2019; Haji et al. 2021). The present findings also indicate that destination services do not contribute equally to tourists' evaluations and future intentions. Accommodation and Local Transport were strongly associated with Destination Affective Image but had no significant direct relationship with Revisit Intentions. In contrast, Activities, Hospitality and Cleanliness were the service dimensions most closely associated with Revisit Intentions. Activities had the strongest direct and total effect on Revisit Intentions. Similar importance of activity-related aspects has been reported by Chan et al. (2015), where leisure activities had the greatest impact on tourists' intentions concerning the tourism experience. The results support the general importance of service quality found in earlier tourism research, but also indicate that the contribution of individual service dimensions depends on the particular behavioral outcome examined.

Our study contributes to the literature by incorporating Environmental Sustainability into the evaluation of the summer holiday experience together with established destination service quality dimensions. Comparable sustainability dimensions have been incorporated into tourism research across different contexts and settings (Dibiku, 2023; Bazneshin et al. 2015; Su et al. 2018; Asmelash & Kumar, 2019; Chamidah 2020; Zakiah et al. 2023; Jasrotia et al. 2023). Service quality covered accommodation, local transport, cleanliness, hospitality and activities, dimensions also examined in previous research on tourism experiences and behavioral intentions (Dolnicar et al. 2015; Ardani et al. 2019; Haji et al. 2021). The measurement model provided acceptable overall fit, while reliability was satisfactory across all constructs. Environmental Sustainability also showed satisfactory reliability and convergent validity, allowing its relationship with Destination Affective Image and Revisit Intentions to be examined within the same structural model as the traditional service dimensions. A relevant contribution emerges from treating environmental sustainability as a separate part of destination evaluation rather

than assuming that favorable environmental perceptions automatically form part of overall service quality. The SEM results further show that conventional service attributes and environmental sustainability can operate differently in the formation of destination evaluations. Environmental Sustainability was psychometrically distinguishable from the service dimensions but did not explain either Destination Affective Image or Revisit Intentions.

Destination Affective Image was expected to provide an intermediate link between destination evaluations and Revisit Intentions. Tosun et al. (2015) found significant relationships between several dimensions of destination service quality and affective image and reported a stronger role of affective image in revisit intentions for repeat tourists. Other studies have also proposed intermediate mechanisms such as satisfaction between tourism experience and behavioral intentions (Trišić et al. 2024; Baghirov et al. 2023). The present results only partly follow such evidence, as Accommodation, Local Transport, Activities and Cleanliness were positively associated with Destination Affective Image and Destination Affective Image was not significantly associated with Revisit Intentions.

Environmental Sustainability did not show a statistically significant relationship with either Destination Affective Image or Revisit Intentions. The result agrees with research where environmental sustainability was not found to be a significant direct predictor of satisfaction or intentions (Bazneshin et al. 2015; Janusz & Bajdor, 2013; Bašan et al. 2021; Jawabreh et al. 2023), although other studies have reported positive direct or indirect relationships between sustainability and behavioral outcomes (Sitepu et al. 2020; Palacios-Florencio et al. 2021; Zulvianti et al. 2022). The divergence across studies suggests that environmental sustainability does not carry the same weight for every tourist group or tourism setting. Several explanations are possible for the present result. Environmental Sustainability had the lowest descriptive mean among the dimensions examined, indicating a less favorable evaluation than hospitality, accommodation, cleanliness or activities. University students may also support sustainability in principle without having detailed knowledge of environmental practices at a destination. Camargo and Gretzel (2017) reported a similar distinction among tourism students, who considered sustainable tourism important while showing limited knowledge of sustainability principles and technical aspects. The domestic character of the sample may also matter. Sörensson and von Friedrichs (2013) found differences between national and international tourists in evaluations of destination sustainability. Familiarity with Greek sun-and-sea destinations may lead domestic visitors to give greater weight to immediate features such as activities, hospitality and cleanliness when considering a return visit.

Demographic characteristics showed limited association with the two main outcome constructs. No statistically significant differences in Revisit Intentions were found according to gender, employment, monthly family income, monthly personal income or type of water sport. Destination Affective Image followed a similar pattern, apart from employment status: students who were not employed reported a more positive affective image than employed students. The effect was modest, and no comparable employment difference appeared for Revisit Intentions, so the result should not be interpreted as evidence that employment determines future tourism behavior. Environmental awareness may be more relevant than broad demographic categories when examining sustainability among student populations. Arrobas et al. (2020) reported differences in attitudes toward sustainable tourism according to students' academic background, while Camargo and Gretzel (2017) showed that favorable views of sustainability can coexist with limited knowledge of sustainable tourism principles. Several limitations should also be considered. The sample consisted of students from five universities in Northern Greece and cannot represent the wider Greek tourist population or international visitors. Recruitment through university social-media groups may also have favored students who are more active online, while social media itself was not measured as a possible influence on destination choice. Social media is particularly relevant for younger tourists and can shape tourism-related behavioral intentions and service experiences (Christou & Chatzigeorgiou, 2020). Cultural familiarity is another limitation because all respondents were domestic tourists evaluating destinations within their own country. The cross-sectional and self-reported design also prevents conclusions about causal relationships or actual future revisits. Future research could directly measure environmental awareness, social-media influence, satisfaction, perceived value and loyalty and could compare domestic students with older age groups and international tourists.

6. Conclusions

The study found that destination service quality dimensions have different relationships with Destination Affective Image (DAI) and Revisit Intentions (RVI). Accommodation (ACC), Local Transport (LT), Cleanliness (CL) and Activities (AT) were positively associated with DAI, while Activities, Hospitality (H) and Cleanliness had significant direct effects on RVI. Activities showed the strongest direct and total effect on revisit intentions. Environmental Sustainability (ES) did not have a statistically significant relationship with either DAI or RVI, while DAI did not significantly affect RVI and did not mediate the relationships between destination services and revisit intentions. Greek university students generally evaluated destination services positively and expressed a moderately positive intention to revisit their summer destination. The academic contribution of the study lies in examining destination service quality, environmental sustainability, affective image and revisit intentions within

the same structural model in the context of domestic university students participating in sun-and-sea water sports tourism. The findings also show that factors contributing to a positive destination image do not necessarily have the same role in the formation of revisit intentions.

Managers, understanding the modern needs of their customers, should focus on improving service quality, creating positive tourism experiences and influencing consumer behavior (Papadopoulos & Tsekouropoulos, 2023). Practical attention should be directed particularly towards activities, hospitality and cleanliness, since all three dimensions were directly associated with revisit intentions. Tourism organizations could monitor visitor evaluations of water sports and leisure activities at the end of each season, while accommodation and food-service businesses could use regular customer feedback to assess hospitality. Local authorities could introduce scheduled cleanliness inspections of beaches and public areas during periods of high tourism demand. Accommodation and Local Transport also require attention because of their stronger relationship with Destination Affective Image. Transport frequency, waiting times and accessibility could be monitored during the summer season, while accommodation providers could record service complaints and guest evaluations. Environmental practices should remain part of destination management even though ES was not significantly associated with revisit intentions. Information on water use, energy conservation, waste management and coastal protection could make existing environmental actions more visible to visitors.

The present study has several limitations. Data were collected from students from five Universities of Northern Greece, so the results cannot be generalized to the wider tourist population. University students belong mainly to Generation Z, while older tourists may evaluate destination services and sustainability differently. Social media influence was not measured, although social media plays an important role in communication and tourism experiences among younger consumers (Christou & Chatzigeorgiou, 2020). Environmental awareness was also not measured directly, making it difficult to determine whether the weak role of ES reflects limited awareness, low importance in destination choice, or characteristics of the particular tourist context. The sample consisted exclusively of domestic tourists, which may also influence perceptions of familiar Greek destinations. Satisfaction, perceived value and loyalty could be incorporated in future research. Larger samples involving different age groups, regions and international tourists would also allow broader comparisons.

Author Contributions

The authors collaborated equally to this editorial.

Conflicts of Interest

The authors have no conflict of interest to declare.

References

- Akinci, Z., Yurcu, G., & Kasalak, M. A. (2018). The mediating role of perception in the relationship between expectation and satisfaction in terms of sustainability in tourism education. *Sustainability*, 10(7), 2253. <https://doi.org/10.3390/su10072253>
- Al-Ababneh, M. (2013). Service quality and its impact on tourist satisfaction. *Institute of Interdisciplinary Business Research*, 164.
- Ardani, W., Rahyuda, K., Giantari, I. G. A. K., & Sukaatmadja, I. P. G. (2019). Customer satisfaction and behavioral intentions in tourism: A literature review. *International Journal of Applied Business and International Management (IJABIM)*, 4(3), 84-93.
- Arrobas, F., Ferreira, J., Brito-Henriques, E., & Fernandes, A. (2020). Measuring tourism and environmental sciences students' attitudes towards sustainable tourism. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 27, 100273. <https://doi.org/10.1016/j.jhlste.2020.100273>
- Asmelash, A. G., & Kumar, S. (2019). The structural relationship between tourist satisfaction and sustainable heritage tourism development in Tigray, Ethiopia. *Heliyon*, 5(3). <https://doi.org/10.1016/j.heliyon.2019.e01335>
- Baghirov, F., Bozbay, Z., & Zhang, Y. (2023). Individual factors impacting tourist satisfaction and revisit intention in slow tourism cities: an extended model. *International Journal of Tourism Cities*. <https://doi.org/10.1108/IJTC-05-2023-0094>
- Baltescu, C. A. (2019). Elements of tourism consumer behaviour of generation Z. *Bulletin of the Transilvania University of Brasov. Series V: Economic Sciences*, 63-68. <https://doi.org/10.31926/but.es.2019.12.61.1.9>
- Bašan, L., Kapeš, J., & Brolich, L. (2021). Sustainable marketing factors: Impact on tourist satisfaction and perceived cultural tourism effects. *Ekonomski vjesnik: Review of Contemporary Entrepreneurship, Business, and Economic Issues*, 34(2), 385-400. <https://doi.org/10.51680/ev.34.2.11>

- Bazneshin, S. D., Hosseini, S. B., & Azeri, A. R. K. (2015). The physical variables of tourist areas to increase the tourists' satisfaction regarding the sustainable tourism criteria: Case study of Rudsar Villages, Sefidab in Rahim Abad. *Procedia-Social and Behavioral Sciences*, 201, 128-135. <https://doi.org/10.1016/j.sbspro.2015.08.141>
- Belias, D., Velissariou, E., Kyriakou, D., Vasiliadis, L., Aspridis, G., Mantas, C., ... & Koustelios, A. (2018). Greece as a sports tourism destination. In *Innovative Approaches to Tourism and Leisure: Fourth International Conference IACuDiT, Athens 2017* (pp. 507-519). Springer International Publishing.
- Bichler, B. F., & Pikkemaat, B. (2021). Winter sports tourism to urban destinations: Identifying potential and comparing motivational differences across skier groups. *Journal of Outdoor Recreation and Tourism*, 36, 100420. <https://doi.org/10.1016/j.jort.2021.100420>
- Boroujerdi, S. S., Mansouri, H., & Asadi, S. (2023). Developing Sports Tourism Destinations in Emerging Countries: The Case of Zrebar Lake in Iran. *Polish Journal of Sport and Tourism*, 30(2), 22-29. <https://doi.org/10.2478/pjst-2023-0010>
- Butnaru, G. I., Niță, V., Melinte, C., Anichiti, A., & Brînză, G. (2022). The nexus between sustainable behaviour of tourists from generation z and the factors that influence the protection of environmental quality. *Sustainability*, 14(19), 12103. <https://doi.org/10.3390/su141912103>
- Camargo, B. A., & Gretzel, U. (2017). What do tourism students know about sustainability and sustainable tourism? An exploratory study of Latin American students. *Journal of Teaching in Travel & Tourism*, 17(2), 101-117. <https://doi.org/10.1080/15313220.2017.1294038>
- Cárdenas, D. A., Byrd, E. T., & Duffy, L. N. (2015). An exploratory study of community awareness of impacts and agreement to sustainable tourism development principles. *Tourism and Hospitality Research*, 15(4), 254-266. <https://doi.org/10.1177/1467358415580359>
- Cardinali, P., Varani, N., & Migliorini, L. (2020). Sustainable Tourism Attitude and Preference in Italian Adults: Value Orientation and Psychological Need Satisfaction. *Sustainability*, 12(24), 10517. <https://doi.org/10.3390/su122410517>
- Castillo-Canalejo, A. M., Sánchez-Cañizares, S. M., & Santos-Roldán, L. (2023). Tourist satisfaction in sun and sea destinations. *International Journal of Business Innovation and Research*, 32(1), 60-80. <https://doi.org/10.1504/IJBIR.2023.134262>
- Chaisasem, T., & Leruksa, C. (2020). Ready to be a host? The potential development guidelines of sport tourism in Buriram Province, Thailand. *African Journal of Hospitality, Tourism, and Leisure*, 9(1), 1-8. <http://www.ajhtl.com/>
- Chamidah, N., Guntoro, B., & Sulastri, E. (2020). Marketing communication and synergy of pentahelix strategy on satisfaction and sustainable tourism. *The Journal of Asian Finance, Economics and Business*, 7(3), 177-190. <https://doi.org/10.13106/jafeb.2020.vol7.no3.177>
- Chan, A., Hsu, C. H., & Baum, T. (2015). The impact of tour service performance on tourist satisfaction and behavioral intentions: A study of Chinese tourists in Hong Kong. *Journal of Travel & Tourism Marketing*, 32(1-2), 18-33. <https://doi.org/10.1080/10548408.2014.986010>
- Chang, M. X., Choong, Y. O., & Ng, L. P. (2020). Local residents' support for sport tourism development: The moderating effect of tourism dependency. *Journal of Sport & Tourism*, 24(3), 215-234. <https://doi.org/10.1080/14775085.2020.1833747>
- Chatzigeorgiou, C. (2017). Modelling the impact of social media influencers on behavioural intentions of millennials: The case of tourism in rural areas in Greece. *Journal of Tourism, Heritage & Services Marketing*, 3(2), 25-29. <https://doi.org/10.5281/zenodo.1209125>
- Chen, N., & Funk, D. C. (2010). Exploring destination image, experience and revisit intention: A comparison of sport and non-sport tourist perceptions. *Journal of Sport & Tourism*, 15(3), 239-259. <https://doi.org/10.1080/14775085.2010.513148>
- Chersulich Tomino, A., Perić, M., & Wise, N. (2020). Assessing and considering the wider impacts of sport-tourism events: A research agenda review of sustainability and strategic planning elements. *Sustainability*, 12(11), 4473. <https://doi.org/10.3390/su12114473>
- Cheung, S. Y., Roger, K., Jennifer, Y., & Jing, F. A. N. (2017). Destination image and sports tourists' consumption patterns of major sports events. *Journal of Multidisciplinary Research*, 9(3), 5-15.
- Choi, D. W. S., Shonk, D. J., Bravo, G., & Choi, D. W. S. (2016). Development of a conceptual model in international sport tourism: Exploring pre-and post-consumption factors. *International Journal of Sport Management, Recreation & Tourism*, 21, 21-47. <https://doi.org/10.5199/ijsmart-1791-874X-21b>

- Christou, E. (2013). Exploring brand confusion through hotel adverts. <https://mpra.ub.uni-muenchen.de/id/eprint/98211>
- Christou, E. (2015). Branding social media in the travel industry. *Procedia-Social and Behavioral Sciences*, 175, 607-614. <https://doi.org/10.1016/j.sbspro.2015.01.1244>
- Christou, E., & Chatzigeorgiou, C. (2020). Adoption of social media as distribution channels in tourism marketing: A qualitative analysis of consumers' experiences. *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 6(1), 25-32. <https://doi.org/10.5281/zenodo.3603355>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences (2nd ed.)*. Lawrence Erlbaum Associates, Hillsdale, NJ.
- Correia, A., Kozak, M., & Ferradeira, J. (2013). From tourist motivations to tourist satisfaction. *International Journal of Culture, Tourism and Hospitality Research*, 7(4), 411-424. <https://doi.org/10.1108/IJCTHR-05-2012-0022>
- Cristobal-Fransi, E., Daries, N., Ferrer-Rosell, B., Marine-Roig, E., & Martin-Fuentes, E. (2020). Sustainable tourism marketing. *Sustainability*, 12(5), 1865. <https://doi.org/10.3390/su12051865>
- De Marchi, D., Becarelli, R., & Di Sarli, L. (2022). Tourism sustainability index: measuring tourism sustainability based on the ETIS toolkit, by exploring tourist satisfaction via sentiment analysis. *Sustainability*, 14(13), 8049. <https://doi.org/10.3390/su14138049>
- Derom, I., & Ramshaw, G. (2018). Leveraging sport heritage to promote tourism destinations: The case of the Tour of Flanders Cyclo event. In *Sport Tourism and Sustainable Destinations* (pp. 101-121). Routledge.
- Di Vaio, A., López-Ojeda, A., Manrique-de-Lara-Peñate, C., & Trujillo, L. (2022). The measurement of sustainable behaviour and satisfaction with services in cruise tourism experiences: An empirical analysis. *Research in Transportation Business & Management*, 45, 100619. <https://doi.org/10.1016/j.rtbm.2021.100619>
- Dibiku, M. G. (2023). The moderating effect of economic viability between sustainable tourism dimensions and tourist satisfaction in Ethiopia using partial least squares. *Cuadernos de Turismo*, (51), 325-347. <https://doi.org/10.6018/turismo.571651>
- Dolnicar, S., Coltman, T., & Sharma, R. (2015). Do satisfied tourists really intend to come back? Three concerns with empirical studies of the link between satisfaction and behavioral intention. *Journal of Travel Research*, 54(2), 152-178. <https://doi.org/10.1177/0047287513513167>
- Duan, Y., & Wu, J. (2024). Sport tourist perceptions of destination image and revisit intentions: An adaption of Mehrabian-Russell's environmental psychology model. *Heliyon*, 10(11). <https://doi.org/10.1016/j.heliyon.2024.e31810>
- Emami, A., Javid, M., Moharamzadeh, M., & Imanzadeh, M. (2023). Exploring the Factors Affecting Sports Tourism Destination Image. *Sports Business Journal*, 3(3), 67-88. <https://doi.org/10.22051/sbj.2023.43801.1096>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Gholipour, H. F., Arjomandi, A., Marsiglio, S., & Foroughi, B. (2020). Is outstanding performance in sport events a driver of tourism? *Journal of Destination Marketing & Management*, 18, 100507. <https://doi.org/10.1016/j.jdmm.2020.100507>
- Gibson, H. J., Kaplanidou, K., & Kang, S. J. (2012). Small-scale event sport tourism: A case study in sustainable tourism. *Sport Management Review*, 15(2), 160-170. <https://doi.org/10.1016/j.smr.2011.08.013>
- Gibson, H. J., Lamont, M., Kennelly, M., & Buning, R. J. (2018). Introduction to the special issue active sport tourism. *Journal of Sport & Tourism*, 22(2), 83-91. <https://doi.org/10.1080/14775085.2018.1466350>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis (8th ed.)*. Cengage Learning EMEA, Hampshire, UK.
- Haji, S., Surachman, S., Ratnawati, K., & Mintarti Rahayu, M. (2021). The effect of experience quality, perceived value, happiness and tourist satisfaction on behavioral intention. *Management Science Letters*, 11(3), 1023-1032. <https://doi.org/10.5267/j.msl.2020.9.040>
- Happ, E. (2021). Tourism destination competitiveness with a particular focus on sport: the current state and a glance into the future—a systematic literature analysis. *Journal of Sport & Tourism*, 25(1), 66-82. <https://doi.org/10.1080/14775085.2021.1888775>
- Harrison-Hill, T., & Chalip, L. (2013). Marketing sport tourism: Creating synergy between sport and destination. In *Sport Tourism* (pp. 170-188). Routledge.

- Hellenic Authority for Higher Education (2023). *Annual report on the quality of higher education 2022*, Hellenic Authority for Higher Education, Athens.
- Hemmonsby, J., & Tichaawa, T. M. (2020). Brand messages that influence the sport tourism experience: the case of South Africa. *Journal of Sport & Tourism*, 24(3), 177-194. <https://doi.org/10.1080/14775085.2020.1822200>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Herbold, V., Thees, H., & Philipp, J. (2020). The host community and its role in sports tourism—Exploring an emerging research field. *Sustainability*, 12(24), 10488. <https://doi.org/10.3390/su122410488>
- Hinch, T., & Ito, E. (2018). Sustainable sport tourism in Japan. *Tourism Planning & Development*, 15(1), 96-101. <https://doi.org/10.1080/21568316.2017.1313773>
- Hritz, N., & Cecil, A. (2019). Small business owner's perception of the value and impacts of sport tourism on a destination. *Journal of Convention & Event Tourism*, 20(3), 224-240. <https://doi.org/10.1080/15470148.2019.1635547>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Huang, S., Weiler, B., & Assaker, G. (2015). Effects of interpretive guiding outcomes on tourist satisfaction and behavioral intention. *Journal of Travel Research*, 54(3), 344-358. <https://doi.org/10.1177/0047287513517426>
- Ito, E., & Higham, J. (2020). Supplemental tourism activities: A conceptual framework to maximise sport tourism benefits and opportunities. *Journal of Sport & Tourism*, 24(4), 269-284. <https://doi.org/10.1080/14775085.2020.1850322>
- Janusz, G. K., & Bajdor, P. (2013). Towards to sustainable tourism—framework, activities and dimensions. *Procedia Economics and Finance*, 6, 523-529. [https://doi.org/10.1016/S2212-5671\(13\)00170-6](https://doi.org/10.1016/S2212-5671(13)00170-6)
- Jasrotia, S. S., Kamila, M. K., & Patel, V. K. (2023). Impact of sustainable tourism on tourist's satisfaction: Evidence from India. *Business Perspectives and Research*, 11(2), 173-189. <https://doi.org/10.1177/22785337211043960>
- Jawabreh, O., Al Dein, F. E., Alshatnawi, E., Jahmani, A., Obeidat, G., & Ali, B. J. (2023). Environmental sustainability and tourism: Parameters of tourist satisfaction at Petra heritage site in Jordan. *ISVS e-journal*, 10(8), 345-359. <https://doi.org/10.61275/ISVSej.2023-10-08-23>
- Jeong, Y., & Kim, S. (2020). A study of event quality, destination image, perceived value, tourist satisfaction, and destination loyalty among sport tourists. *Asia Pacific Journal of Marketing and Logistics*, 32(4), 940-960. <https://doi.org/10.1108/APJML-02-2019-0101>
- Jeong, Y., Kim, S.-K., & Yu, J.-G. (2019). Determinants of behavioral intentions in the context of sport tourism with the aim of sustaining sporting destinations. *Sustainability*, 11(11), 3073. <https://doi.org/10.3390/su11113073>
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling (4th ed.)*. Guilford Press, New York.
- Kolotukha, O. V., Myrgorodska, O. L., Kozynska, I. P., & Bozhuk, T. I. (2023). Geographic assessment of obstacles on European rivers for water sports tourism. *Journal of Geology, Geography and Geoecology*, 32(2), 295-309.
- Koutra, C., & Karyopouli, S. (2013). Cyprus' image—a sun and sea destination—as a detrimental factor to seasonal fluctuations. Exploration into motivational factors for holidaying in Cyprus. *Journal of Travel & Tourism Marketing*, 30(7), 700-714. <https://doi.org/10.1080/10548408.2013.827548>
- Kurian, F. (2023). Sustainable tourism development: A model examining the relationship between destination image, tourist satisfaction, and tourism loyalty. *Journal for ReAttach Therapy and Developmental Diversities*, 6(10s), 1800-1811. <https://doi.org/10.53555/jrtdd.v6i10s.2323>
- Li, L. (2023). Rural tourism image optimization by big data technology in green environment. *Global NEST Journal*, 25(5), 50-56. <https://doi.org/10.30955/gnj.004634>
- Liu, C. H., Horng, J. S., Chou, S. F., Chen, Y. C., Lin, Y. C., & Zhu, Y. Q. (2015). An empirical examination of the form of relationship between sustainable tourism experiences and satisfaction. *Asia Pacific Journal of Tourism Research*, 21(7), 717-740. <https://doi.org/10.1080/10941665.2015.1068196>

- Luo, W., & Wu, S. (2023). The influence of transportation on regional tourism economic development under the environment of sustainable development: Taking Guizhou Province in China as an example. *Global Nest Journal*, 25(5), 106-112. <https://doi.org/10.30955/gnj.003058>
- Ma, W., Ma, X., Zhuang, D., Shi, X., & Gao, Y. (2025). Assessing the impact of inbound tourism on carbon emissions: Evidence from the Belt and Road Initiative countries, *Global NEST Journal*, 27(6). <https://doi.org/10.30955/gnj.07383>
- Miedes-Ugarte, B., & Flores-Ruiz, D. (2024). Strategies for the Promotion of Regenerative Tourism: Hospitality Communities as Niches for Tourism Innovation. *Administrative Sciences*, 15(1), 1.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). McGraw-Hill, New York.
- Palacios-Florencio, B., Santos-Roldán, L., Berbel-Pineda, J. M., & Castillo-Canalejo, A. M. (2021). Sustainable Tourism as a Driving force of the Tourism Industry in a Post-COVID-19 Scenario. *Social Indicators Research*, 158(3), 991-1011. <https://doi.org/10.1007/s11205-021-02735-2>
- Papadopoulos, N., & Tsekouropoulos, G. (2023). The application of service quality on tourist stadia: the role of value and satisfaction on spectators' intentions. *International Journal of Sustainable Agricultural Management and Informatics*, 9(1), 19-40. <https://doi.org/10.1504/IJSAMI.2023.127542>
- Prayag, G., Suntikul, W., & Agyeiwaah, E. (2018). Domestic tourists to Elmina Castle, Ghana: Motivation, tourism impacts, place attachment, and satisfaction. *Journal of Sustainable Tourism*, 26(12), 2053-2070. <https://doi.org/10.1080/09669582.2018.1529769>
- Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures*, 6(2), 77-98. <https://doi.org/10.1080/19312458.2012.679848>
- Puiu, S., Velea, L., Udristioiu, M. T., & Gallo, A. (2022). A behavioral approach to the tourism consumer decisions of generation Z. *Behavioral Sciences*, 12(9), 320. <https://doi.org/10.3390/bs12090320>
- Robinson, V. M., & Schänzel, H. A. (2019). A tourism inflex: Generation Z travel experiences. *Journal of Tourism Futures*, 5(2), 127-141. <https://doi.org/10.1108/JTF-12-2017-0059>
- Ruiz Palacios, M. A., Pereira Texeira de Oliveira, C., Serrano González, J., & Saénz Flores, S. (2021). Analysis of tourist systems predictive models applied to growing sun and beach tourist destination. *Sustainability*, 13(2), 785. <https://doi.org/10.3390/su13020785>
- Sitepu, E. S., Agus, R., Nasution, H. P., Khalid, N. R. B., Zainudin, A. H. B., & Hassan, J. B. (2020). The role of sustainable tourism development on tourist satisfaction and revisit intention. In *Prosiding International TVET Academic Research Conference* (Vol. 2020).
- Sörensson, A., & von Friedrichs, Y. (2013). An importance–performance analysis of sustainable tourism: A comparison between international and national tourists. *Journal of Destination Marketing & Management*, 2(1), 14-21. <https://doi.org/10.1016/j.jdmm.2012.11.002>
- Su, L., Swanson, S. R., & Chen, X. (2018). Reputation, subjective well-being, and environmental responsibility: The role of satisfaction and identification. *Journal of Sustainable Tourism*, 26(8), 1344-1361. <https://doi.org/10.1080/09669582.2018.1443115>
- Surugiu, C., Surugiu, M. R., Grădinaru, C., & Grigore, A. M. (2025). Factors Motivating Generation Z in the Workplace: Managerial Challenges and Insights. *Administrative Sciences*, 15(1), 29.
- Tosun, C., Dedeoğlu, B. B., & Fyall, A. (2015). Destination service quality, affective image and revisit intention: The moderating role of past experience. *Journal of Destination Marketing & Management*, 4(4), 222-234. <https://doi.org/10.1016/j.jdmm.2015.08.002>
- Trišić, I., Štetić, S., Candrea, A. N., Nechita, F., Apetrei, M., Pavlović, M., ... & Perić, M. (2024). The impact of sustainable tourism on resident and visitor satisfaction—The case of the Special Nature Reserve “TitelskiBreg”, Vojvodina. *Sustainability*, 16(7), 2720. <https://doi.org/10.3390/su16072720>
- Tsitskari, E., Paschalidou, K., & Papadopoulos, N. (2025). Seeking for Sustainability in Greek Sports. Chapter 4. In the book: Grimaldi-Puyana, M., García-Fernández, J., Mohammadi, S. & Gálvez Ruiz, P. (2025). *A Global Perspective of Sustainability in Sports Organizations*, Emerald Publishing, United Kingdom, ISBN: 978-1-83608-726-7 (Online).
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: An analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, 44(1), 119-134. <https://doi.org/10.1007/s11747-015-0455-4>
- World Tourism Organization, UNWTO (2019). *Tourism definitions*. 58 p. <https://doi.org/10.18111/9789284420858>

- Zakiah, S., Baharta, E., & Hermana, D. (2023). Analysis of Tourist Loyalty and Satisfaction Based on Destination Image of Sustainable Tourism in West Java. *Jurnal Ilmu Manajemen Advantage*, 7(1), 97-108. <https://ejournal.itbwigalumajang.ac.id/index.php/adv>
- Zeithaml, V. A., & Bitner, M. J. (2003). *Service Marketing. Integrating Customer Focus across the Firms*. McGraw-Hill, New York, NY.
- Zulvianti, N., Aimon, H., & Abror, A. (2022). The influence of environmental and non-environmental factors on tourist satisfaction in halal tourism destinations in West Sumatra, Indonesia. *Sustainability*, 14(15), 9185. <https://doi.org/10.3390/su14159185>

Appendix

Examined Items

Accommodation

Cleanliness of accommodation
Quality of food at accommodation
Speed of check-in and check-out at accommodation
Attitude of staff at accommodation
Level of services at accommodation

Local Transport

Frequency of local transport services
Network (accessibility) of local transport services
Comfort of local transport services
Attitude of local drivers

Cleanliness

Overall cleanliness of the destination
Cleanliness of beaches
Cleanliness of sea
Cleanliness of restaurants
Cleanliness of bars

Hospitality

Attitude of local people
Friendliness of local people
Attitude of staff in tourism overall
Attitude of staff at bars
Attitude of staff at restaurants

Activities

Availability of shopping facilities
Suitability of nightlife
Suitability of entertainment
Availability of daily tour services to other destinations and attractions
Availability of health services
Availability of sports facilities

Environmental Sustainability

Integration of tourism and the environment
Pressure of tourist activities on fauna and flora species
Percentage of water and energy resources consumption caused by tourism
Level of pollution (water, sound, soil, and air) due to tourism
Efforts made to minimize damages on the environment

Destination Affective Image

My vacation was exciting
My vacation was enjoyable
My vacation relaxed me
My vacation was arousing

Revisit

I would like to visit this destination again in the near future
If I had to decide again, I would choose the same destination again
I would return to this destination in the future
I would visit this destination more often
This destination will be my first choice over other destinations