

Examining the Relationships between Tourists' Connectedness to Nature and Landscape Preferences

Aslı Özge Özgen Çiğdemli ¹
Ceren Avcı ²

1. Osmaniye Korkut Ata University, Faculty of Kadirli Applied Sciences, Recreation Management, Kadirli, Osmaniye, Türkiye

2. Şırnak University, School of Tourism and Hotel Management, Department of Gastronomy and Culinary Arts, Şırnak, Türkiye

ABSTRACT

The main purpose of the present research is to examine the relationships between the level of tourists' connectedness to nature (CTN) and their landscape preferences (LP). For this purpose, the study first measures the construct validity and reliability of the CTN scale developed by Mayer and Frantz (2004) to confirm its appropriateness for different cultures and the originally one-dimensional structure of the scale is tested. Second, the LPs of domestic and foreign tourists are determined from six different landscape pictures and a relationship is sought between the tourists' CTN levels and LP. The primary data were gathered through surveys of foreign and domestic tourists staying in Antalya. The relationships between the CTN and LP were determined by multinomial logistic regression analysis (MLRA). According to the findings, as the level of tourists' CTN increases, their preference levels for shopping malls and historical places also increase. It has also been determined that as the CTN increases, preferences for beaches increases, too. Women who prefer shopping malls and historical sites are less likely than men to prefer wildlife. Also, as the preference for historical sites increases, the CTN level increases, too. The results of the study will be beneficial for planners to manage the landscape in destinations and to use the resources effectively.

KEYWORDS

Connectedness to Nature, Landscape Preferences, Tourist, Psychology of Connectedness to Nature, Antalya, Multinomial Logistic Regression Analysis.

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1. Introduction

Nature is an indispensable element for the continuity of human life. This statement is based on Wilson's (1984) biophilia hypothesis and asserts that humans have an intrinsic bond with nature, and the human relationship with the natural world is crucial for our well-being and survival. The hypothesis also argues that humans have an instinctive compulsion to seek out and engage with nature and non-human organisms, and this connection has a significant impact on physical, mental, and emotional health (Wilson, 1984; Kellert & Wilson, 1993). With this in mind, environmental protection and sustainability have been the main themes of many studies since the 1980s (e.g., Butler, 1991; Westley & Vredenburg, 1996; Levett, 1998). Studies aimed at making sense of the complex linkages between humans and nature, identifying barriers to environmental behaviors, and filling the gaps about how environmental awareness and knowledge evolve into environmental attitudes and behaviors have made significant contributions to the field of environmental psychology (Kollmuss & Agyeman, 2002).

A number of related aspects of these concepts are of critical importance. These include evaluating environmental psychology; providing environmental sustainability and protection of nature; personal characteristics, such as connectedness to nature (CTN); nature-oriented experiences, such as spending time in nature; relationship and interaction with nature; accumulating knowledge and awareness about nature; esteeming nature; and pro-environmental attitudes and behaviors (Richardson et al., 2020). In this regard, CTN provides an idea about how people define themselves in terms of their environmental orientation, how they identify themselves with nature, whether they see themselves as a part of nature and their position in the environment as a living organism and how they make sense of their relationship with nature (Restall & Conrad, 2015). Similarly, Zylstra et al. (2014) define CTN as a sustainable relationship between human beings and nature, including cognitive, emotional and experiential awareness, behaviors, and attitudes. The fact that individuals with a high level of connectedness to nature have a more protective tendency towards the environment and the existence of relations between individuals' sustainable behaviors and their state of connectedness to nature (Barrera-Hernández et al., 2020) demonstrates the importance of the study subject, both in the literature and in practice.

The CTN, which makes a significant contribution to environmental psychology, also creates an important framework in terms of tourism's close relationship with nature. First of all, many tourism activities require the existence of a natural environment and resources in every aspect, from transportation, entertainment, travel, food and beverage services to accommodation (Buckley, 2011). Furthermore, as natural areas are an important source of attraction for tourists (Buhalis, 2000), they create a great tourism demand. The uncontrolled development of tourism demand, especially in virgin lands, and the burdens of mass tourism on natural resources and ecosystems result in environmental degradation, erosion of the soil and pollution of air, land and water, and especially of beaches (Das & Chatterjee, 2015). Moreover, the excessive consumption behaviors of tourists in popular destinations do immeasurable damage to natural habitats and historical heritage sites (Neto, 2003). At destinations with limited resources, the increasing presence of tourists leads to environmental concerns about preserving and conserving the natural environment (Øian et al., 2018).

Consequently, destination managers and relevant stakeholders who want to benefit from the positive aspects of tourism want to determine the acceptable level of visitor usage that does not exceed the ecological carrying capacity and the level of environmental impact of use by tourists. In this respect, it is important to evaluate the pro-environmental behaviors of visitors at an individual level, according to the type of activity (hunting, fishing, etc.) (Wolf et al., 2019) so as to minimize the environmental impact. With this in mind, this study aims to examine the connectedness to nature and landscape preferences of visitors to one of Turkey's most visited cities, Antalya. In aiming to examine this subject, the focus has been on monitoring the state of the art in terms of one of the most important subjects in tourism, namely sustainability, and clarifying preferences relating to sustainable behaviors.

It is known that the development of tourism affects landscape planning and arrangements in the areas where tourism is carried out, along with the negative effects that it has on the natural environment. Bastian et al. (2015) emphasize that an alluring landscape and experience in nature are the most essential factors for tourists to visit a place. From this point of view, the landscape is a symbolic indicator of the

meaning that people attribute to nature and the environment, and also refers to the visual, cultural and ecological output that emerges as a result of the interaction between people and nature (Jiménez-García et al., 2020). Sandell (2016), on the other hand, states that landscape is a heterogeneous structure in which people live which they are a part of, unlike land, field or nature. In this regard, landscape plays an important role in developing products in tourism, creating touristic attractions, making recreational areas functional, and highlighting visual aesthetics, harmony and authenticity in destinations (Skowronek et al., 2018). For this reason, the present study aims to examine landscape preferences as a symbol of touristic behavior antecedents and match it up with tourists' CTN level to make a contribution to more accurate landscape planning.

Environment-oriented behavior of tourists, which is important for the sustainability of tourism, has been frequently discussed and studied together with the concepts of pro-environmental behavior (Dolnicar et al., 2017; Han & Hyun, 2017; Han et al., 2018; Olya & Akhshik, 2019; Yan & Jia, 2021; Tang et al., 2021; Loureiro et al., 2022); responsible behavior (Han et al., 2016; Xu et al., 2018; Dias et al., 2021; Fenitra et al., 2021); green tourist attitude and behavior (Leonidou et al., 2015); and environmental knowledge (Najjarzadeh et al., 2018). Nonetheless, research examining the relationship between CTN and tourism is relatively limited (e.g., Moriki et al., 2018; Cheung et al., 2019; Liu et al., 2019; Çınar & Duran, 2021).

Another aspect of the landscape that is examined in tourism studies is tourists' landscape preferences and perceptions (e.g., Siegrist et al., 2008; Fyhri et al., 2009). Studies reveal that individuals' attitudes, values and beliefs towards nature affect their landscape preferences (Yılmaz et al., 2016). However, studies examining the relationships between connectedness to nature and landscape preferences have focused on education (e.g., Tang et al., 2014; Yılmaz et al., 2016; Taylor, 2018; Van Heezik et al., 2021) and are relatively new and still in the development stage (Davis & Gatersleben, 2013; Bastian et al., 2015). It is important for tourism planners, marketers, and tourist product providers to consider whether tourists/visitors really tend to prefer nature-based tourism landscapes for vacations, if they are characteristically connected to nature, or whether they should be offered an integrated tourism experience.

Therefore, the study aims to fill the gap about CTN and landscape preferences in tourism literature and aims to contribute to more sustainable alternatives in public or private sector landscape planning. It tries to make sense of the tourists' CTN through their landscape preferences, and thus, tries to determine whether a linear relationship can be established between landscape preferences and CTN, by considering possible scenarios for areas where tourism can be concentrated, based on preferences, and in which cases and under which conditions such concentration will not harm the environment. In the absence of such a relationship, another aim of the study is to reveal which variables may be related to landscape preferences; it is thought that there is a linear relationship between landscape preferences and CTN and landscape preferences contain clues about tourists' CTN. Thus, it may be possible to formulate an opinion about CTN based on landscape preferences.

This study focuses on contributing to this development and consists of two steps. First, the construct validity of the scale for measuring CTN devised by Mayer and Frantz (2004) was examined with exploratory factor analysis (EFA) to demonstrate its one-dimensional structure and confirmatory factor analysis (CFA) was conducted to determine its conformity with the CTN scale's original factor structure. The reliability of the measurement scale was also analyzed. Second, the relationships between the level of CTN and landscape preferences (LP) of domestic and foreign tourists visiting Antalya were examined by a quantitative research method. Findings related to tourists' landscape preferences obtained in this research are expected to contribute to tourism planning and policy development.

2. Literature Review

2.1 Connectedness to Nature

The connectedness to nature trait influences both how a person thinks about oneself to how one conceptualizes one's relationship with others. Spending time in nature helps a person feel connected to nature. At the end of this process, an individual is more likely to care about and protect nature (Beery & Wolf-Watz, 2014; Häyrynen & Pynnönen, 2020). In a study, Tam (2013) analyzed CTN as a fundamental concept for environmentalism. CTN describes the degree to which a person feels they are a part of nature. Theoretically, CTN serves as a basis for pro-environmental integrity, attitudes, and behaviors. It has also been argued that if people recognized themselves as a part of nature, they would not harm nature (Mayer & Frantz, 2004; Frantz et al., 2005; Arendt & Matthes, 2014). Since nature can be interpreted as a collective community to which people belong, it is suggested that collective identity also plays a decisive role in connectedness to nature (Restall & Conrad, 2015). As a consequence, in terms of personal benefits, CTN is related to happiness, well-being, awareness, innovative thinking and other positive indicators (Lankenau, 2016; Fretwell & Greig, 2019; Flynn et al., 2022).

In the study of Thompson and Barton (1994), the relationship between two motives underlying attitudes towards nature was examined: ecocentrism and anthropocentrism. Anthropocentrists see the physical environment as a tool to be used to achieve goals, not as having its own values. Ecocentrists, on the other hand, perceive the environment as a context that enriches the human spirit, independent of its contribution to one's material goals. Anthropocentrists are utilitarian; nature is valuable because it can contribute to the satisfaction of human desires. For ecocentric individuals, nature has an independent value and must be morally evaluated on its own.

Moreover, according to the study of Riechers et al. (2020), the stimulation of senses and motoric development, and especially the individual's own childhood experiences, have been accepted as components of experiential nature connectivity. Experiential connectedness has been associated with emotional connectedness. Self-identification with the landscape, knowledge about environmental practices, and especially knowledge of certain historical events have emerged as the key components of cognitive connectedness to nature. In addition, general environmental education affects cognitive connectedness. Affective commitment has also been associated with philosophical connectedness. Philosophical connections have emerged from discussions of different concepts of sustainability or the need to fit the future; a critical view of consumerism increases philosophical connectedness to nature.

There has been a shift from cognitive explanations (Reid et al., 2010) to more emotional or empathy-based explanations (Chen et al., 2015) about the reasons for environmental friendliness. These explanations emphasize the linkages and emotions between person and nature. This human-nature linkage is defined as a natural human need and it is argued that having a suitable bond keeps people healthier (Wyles et al., 2019). Environmental identity, unity with nature and commitment to nature are conceptually similar and are measured in similar ways (Ojala, 2009).

There is appreciable documentation in the literature that individuals make great efforts to exist socially, and they have a universal need for belonging. Exclusion has catastrophic psychological outcomes, because in the absence of recognition, peering, and appreciation in affiliate relationships, human life loses a great deal of its meaning. People who believe that their social ties are insufficient feel lonely. Close relations that prevent loneliness need a sense of trust in the sensitivity of the other. Therefore, close relationships have more continual, varied and lasting effects on the thinking, feelings and behaviors of the other person (Gössling et al., 2016; Slatcher & Selcuk, 2017). On the other hand, egoistic concerns are based on seeing oneself superior to other people and other living things. Although egocentric values are generally accepted as opposed to environmentalism, it is possible to expect environmentalist behaviors from people with high egoism when they recognize a hazard arising from environmental destruction. According to the social-altruistic approach, one becomes interested in environmental problems when one evaluates such problems in terms of costs or benefits based on individuals, a social organization, a country, or the whole of humanity.

Alternatively, according to the biospheric approach, environmental concerns stem from the fact that all living things are based on a common value (Schultz, 2000). Spirituality is also one of the most important factors that define commitment (Willson et al., 2013). According to Chawla (1998), sensitivity to nature appears to be linked to certain forms of meaningful life experiences.

In the study conducted by Rosa et al. (2019), it was revealed that CTN has an indirect effect on leisure time satisfaction. This effect was influenced by nature connectedness behavior in childhood. Also, in the study of Wheaton et al. (2015), it was found that the CTN levels of the visitors increased during a three-hour tour but returned to their pre-visit levels after three months. As reported in the study by Shen and Saijo (2008), high household income, older ages and high education levels increase environmental concerns. Furthermore, in Taylor's (2018) study, it was detected that students of African origin prefer natural landscapes rather than urbanized surroundings, and their perceptions of nature and landscapes are the same as those of students from other ethnic groups.

According to the research of Liu et al. (2019), both genders have the same implicit or explicit attitudes towards the woman-nature relationship. Furthermore, the woman-nature relationship is effective on positive environmental intentions, and people can develop protective environmental behaviors under the influence of CTN. In addition, Davis and Gatersleben (2013) found that high levels of CTN presume transcendent and impressive experiences as positive, especially in the wild, whereas low levels of CTN predict more disturbing experiences. In their study on tourists, Derek et al. (2017) asserted that there was no consistency between expressed preferences and the natural features present around the tourists' accommodation. In addition, tourists were not interested in activities with a high nature criticality index. In the study of Hinds and Sparks (2008), it was revealed that emotional connection significantly affects the intention to relate to the natural environment, and environmental identity is a significant predictor in the absence of emotional connection. Moreover, in the study of Dietz et al. (2002), no significant differences were found between the genders in the nature-oriented value factor structure, but differences were found in the value priorities, where women ranked altruism as more important than men.

Social organization structures have been changing in recent times. For instance, in the USA, transformation in social structure in the last twenty-five years has been analyzed and it has been found that memberships of voluntary associations have decreased continuously and significantly. In the early 2000s, it has been argued that the conventional form of society (e.g., place-based) was eroded and resolved by the spread of technology, modernity, urbanization and globalization. In this regard, there is a transformation from place-based societies to more individual-centered ones. Individuals can be a part of special interest groups by engaging in various activities and commitment to anything is seen as one of the basic elements of belonging (Gössling et al., 2016).

According to Ernst and Theimer (2011), although environmental sensitivity itself is accepted as an emotional variable, its development depends on the interaction of outdoor experiences, positive human interactions, and information about the natural environment. Regarding the human-nature relationship, an emotional bond which develops between people and their environment can also be affected by the human-place bond. Place identity suggests that there is an emotional bond between people and particular places, and the degree to which particular environments meet a person's needs for a desirable activity will lead to place identity and place bonds.

Lastly, in several studies, the elements used for representing the natural environment have mostly positive connotations (e.g., forest, dolphins). The elements handled for symbolizing the built environment, on the other hand, have mostly negative connotations (e.g., firms, street). However, both natural and built environments have dangerous aspects. Therefore, according to Verges and Duffy (2010), it cannot be determined whether attachment to these surroundings changes as a function of positive and negative interpretations related to the concepts used.

2.2 Connectedness to Nature in Tourism

In the tourism literature, CTN has mostly been handled within the scope of environmentally responsible behavior (ERB). There are many studies on such behavior. A study conducted in South Korea revealed that the emotional value given to the experience in tourism has an impact on ERB (Kim & Thapa, 2018). A study conducted in China provided evidence that satisfaction from experience leads to ERB intention

(Cheng et al., 2022). While another study conducted in China found that memorable tourism experiences lead to ERB (Chen et al., 2023), a different study conducted in Australia found that personal characteristics were associated with ERB (Dolnicar & Leisch, 2008). While a study conducted in Taiwan found that aesthetic experience, ease of experience, and learning experience affect the biospheric value and the biospheric value affects the ERB within the scope of smart tourism (Lee & Jan, 2023), another study conducted in Taiwan revealed that ERB was affected by place attachment, recreational involvement and commitment to conservation (Lee, 2011). A study conducted in Malaysia similarly found that commitment to conservation has an effect on ERB (Patwary, 2023). In another study conducted in Korea, it was revealed that the perception of the climate crisis and tourist experiences have an impact on ERB (Han et al., 2016). Moreover, in a study conducted in national parks, it was revealed that place attachment has an effect on ERB (Sthapit et al., 2022). In addition, altruism has been found to be effective on ERB (Park et al., 2022). Overall, it turns out that ERB is related to the tourism experience, place attachment and perceptions and attitudes towards environmental problems.

ERB is also a subject within the scope of planned behavior theory. In a study conducted on ecotourism behavior - which indicates an area where ERB can be addressed in tourism - it was found that environmental attitudes, subjective norms and perceived behavioral control have an effect on ecotourism intention. In addition, the perceived usefulness of ecotourism, biospheric value and ecotourism self-identity have been found to be influential on environmental attitudes (Lee & Jan, 2017). In a study conducted in China, it was revealed that place attachment and place identity are influential in the formation of ERB intention (Chow et al., 2019). In a study conducted in Thailand, it was found that destination attachment and nature-based tourism experience are influential in the formation of pro-environmental attitudes. On the other hand, a vacation mindset and different social norms had a negative effect on pro-environmental attitudes (Chubchuwong et al., 2015). In another study conducted in the Canary Islands, it was determined that environmental concerns, environmental knowledge and eco-guilt had an indirect effect on the intention to revisit the destination (Bahja & Hancer, 2021).

One of the few studies on CTN in tourism was carried out in China. CTN indirectly affects pro-environmental behavior through the perceived value of cultural ecosystem services, place attachment, and event attachment (Zhang et al., 2023). In another study conducted in Western Australia, it was found that personal norms and CTN affect pro-environmental behavior, while social norms did not (Pearce et al., 2022). In another study carried out in China, it was revealed that individuals who support the view that growth should be more limited and who are more worried about the climate crisis have a desire to be in close contact with nature, and wish more strongly to escape from routine and urban phenomena, while individuals whose motivations are for new abilities and skills and who seek to develop new experiences and social contacts rather support the view that humans have priority over nature (Luo & Deng, 2008).

In more related studies, Ojala (2009) found that while leisure activities in nature predicted the ecological worldview of people with a high level of emotional CTN, the same prediction was not realized in people with low CTN. In the study by Wang et al. (2020), it was revealed that internal and external religiosity has a direct impact on pro-environmental behaviors in hotels through simple consciousness and CTN. In the studies of Qiu et al. (2018), which investigated the sensory dimensions of place and its effect on sustainable tourism, it was found that CTN does not have a direct effect on pro-environmental behavior but has an indirect effect through place attachment. In a study examining the demand structure of nature-based tourism with reindeer visits in Norway (Lindberg et al., 2019), it was found that avoiding negative impacts on wildlife habitat was a priority among tourists and this was more dominant among non-Norwegians. CTN predicted their preference for visiting the reindeer facility, while intrinsic values implicitly predicted these preferences through the level of CTN.

In a study conducted with 82 Chinese tourists who visited Antarctica, it was determined that the reasons for visiting pure nature are in a low percentage. However, most of the visitors commented on the importance of protecting and preserving the environment and appreciating wild nature. It turns out that visitors have a reasonably close relationship with nature, though their environmentalist scores are not high (Cheung et al., 2019). In another study (Wheaton, Ardoin, Hunt, Schuh, Kresse, Menke & Durham, 2016) on visitors who participated in a tour to watch elephant seals in national parks, it was found that the visitors' CTN increased in the first 3 hours of the tour but returned to pre-visit levels after 3 months.

In the study of Beery and Wolf-Watz (2014) on outdoor recreation and nature-based tourism, it was revealed that there is a minimal relationship between CTN measures and self-reported environmental behavior. It has been argued that there is a material and objective perspective in the measurement of CTN and this perspective ignores perception, value and expression.

In the study of Moriki et al. (2018) on nature-based tourism and CTN, it was showed that links exist between CTN, or the feeling of being related, and appreciation of the body. However, though this feeling of connection is associated with appreciation of the body, it is not associated with self-esteem. In addition, it has been mentioned that the direct relationship developed with nature through nature-based tourism also has an effect on CTN. In another study (Rosa et al., 2019), it was determined that taking part in nature-based leisure activities as a child positively affects CTN, encourages life satisfaction and participation in nature-based leisure activities in adulthood.

In another study, conducted in Poland to determine the attitudes of local people towards nature-based rural tourism activities and their level of CTN (Strzelecka et al., 2023), it was found that psychological and social empowerment had a significant and positive effect when the attitude towards nature-based tourism is explained by CTN. It was also determined that it had a direct and positive effect on tourism support. As seen in many studies conducted to measure CTN, CTN is closely related to feeling a relationship with nature and this relationship also supports pro-environmental behavior.

2.3 Landscape Preferences

Participants who consider the psychological and biological characteristics of the landscape, rather than its functional features, are more environmentally centered; Van den Berg et al. also concluded that the perceived beauty of a landscape was not affected by group differences in any way (Van den Berg et al., 2006). A different study revealed that demographic factors are important in landscape preferences, but less decisive than the selected landscape indicators (Ode et al., 2009). So, perception in landscape preferences causes a preference behavior together with the individual's psychological mechanism. A study on landscape preferences by Lyons (1983) found demographic factors affect landscape preferences and this is a cumulative process.

Although some academics object to the assumptions that leisure time behaviors and landscape preferences are a function of human genetics, and evolutionary adaptation, the biophobia thesis persists in the literature (Taylor, 2018). On the other hand, repetitive patterns, rhythms, and sharp forms are often seen as important visual features in people's reactions to landscapes and shape their preferences, unlike random, scattered, fuzzy or dispersed forms. Thus, legibility factors play an important role in environmental preferences (Abello & Bernaldez, 1986).

In the study of Hagerhall et al. (2004), the connections between landscape preference and fractal (complex geometric shapes) features were researched, and it was concluded that many natural forms motivate the preference for fractals. The literature on landscape aesthetics has identified nine key concepts that define visual character. These concepts refer to measurable features of the landscapes (Ode et al., 2009) but were not used in the present study.

Like environmental determinism, the early discipline of cultural geography had a materialistic understanding and was concerned with visible transformations of the landscape and human culture through population and settlements, with natural resources as physical forms of production. With more recent cultural trends, the environment has begun to be treated not as a clearly definable objective reality, but as a conceptual structure related to the social one and including values and norms that differ in various social contexts (Beery & Wolf-Watz, 2014). For this reason, the artificial environment and the natural environment assume different representations as structures corresponding to different phenomena in the social context.

The importance that an individual attaches to an object is related to what place this object finds in the person. In choosing different landscapes to be part of, it is thought that genders will differ in their relationship with nature and the importance they give to it. Indeed, it is understood from the expression "mother nature" (Liu et al., 2019) that nature evokes the female sensibility more. In the study by Liu et al. (2019), with the implicit association test on women and men, it was revealed that both genders agree

that women are more related to nature and likening nature to a woman encourages more CTN and pro-environmental behavior. CTN partially mediated the anthropomorphic effect on environmental behavior. It is seen that the analogy of nature to women is common among women and men and, since nature is associated with women, CTN is felt and protective behavior is encouraged. In addition, CTN has an indirect, if not direct, effect on pro-environmental behavior.

According to the literature, the following hypotheses are proposed in this study:

- H1.** If the CTN level of the tourists increases, their preference level for natural landscapes will also increase.
- H2.** Tourists who prefer artificial landscapes are less likely to prefer natural landscapes.
- H3.** There are differences in landscape preferences between women and men.

3. Method

The primary purpose of the research is to predict the relationships between tourists' connectedness to nature and their landscape preferences (see also the section on landscape preferences of tourists). In accordance with the primary aim of the research, the construct validity and dimensions of the CTN scale developed by Mayer and Frantz (2004) were analyzed and the level of CTN of tourists was assessed. Secondly, the relationships between tourists' landscape preferences and CTN levels were analyzed by multinomial logistic regression analysis.

To determine the preferences, participants were asked to choose from six pictures of different landscapes (beach, forest, historical site, shopping mall, city and a wildlife area). The landscapes were categorized according to their dominant characteristics. Therefore, forest, beach and wildlife were classified as natural landscapes, while historical sites, shopping centers and cities were categorized as cultural or, in other words, artificial landscapes (Skowronek et al., 2018; Terkenli, 2021). The analysis results were assessed according to this bipolar scale, aiming to give an idea of tourists' behaviors to tourism policymakers and planners.

For this purpose, a quantitative research design and a survey technique were implemented. Surveys were carried out by a four-person team in June-July 2021 among domestic and foreign tourists who visited Antalya. The population of the study was all the tourists who visited Antalya during June-July 2021. Because the exact size of the population was unknown, with a simple random sampling method, maximum variability is assumed to be 0.5. The confidence level is 95%, confidence interval ± 5 and standard deviation is 1.96 (Sarmah et al., 2013). The sample size was 384. 384 surveys were collected and, after eliminating incomplete surveys, 352 surveys remained for analysis.

3.1 Measurement Scale

The validity and the reliability of the scale were examined to determine the one-dimensional structure of the CTN scale developed by Mayer and Frantz (2004). The scale construct validity was scrutinized with exploratory factor analysis (EFA) and reliability analysis (RA) was performed. In the study, the CTN analysis performed by Mayer and Frantz (2004) was used to quantify the experience of an emotional individual connection with nature. The CTN scale consists of 14 items and has a five-point Likert-type structure ranging from "strongly disagree" to "strongly agree". Three statements (4, 12 and 14) of the scale are reverse scored. The Cronbach Alpha value of the one-dimensional scale is 0.84. The scale was translated into Turkish using a two-way interpretation procedure (also known as 'back-translation'). This method involves a native Turkish speaker with excellent English proficiency translating the scale into Turkish, and the resulting Turkish form being translated back into English by an independent English-speaking expert with excellent Turkish proficiency (Vallerand, 1989).

Before the survey, the participants were informed about the scale, its contents and purpose, and their informed approval was received for their participation. It was observed that the participants completed the scale survey within 10 minutes. EFA was performed with SPSS 23 to determine the dimensionality of the scale (Embretson & Reise, 2000). Mean, standard deviation, skewness-kurtosis, asymmetry index (descriptive analysis) and reliability analysis (Cronbach's Alpha) were also applied.

3.2 Tourists' Connectedness to Nature and Landscape Preferences

To determine the relationship between tourists' CTN and LP, the CTN scale, whose construct validity and reliability had been previously verified, was used in Turkish sample. After it was approved by a sample group of 20 participants that the scale expressions were understandable, validity and reliability of the scale were tested with 210 participants. After testing the scale, the study was conducted over 352 participants from the remaindes 384 questionnaires. In addition, six pictures were presented to the participants, and they were asked to specify their holiday preferences (beach, forest, shopping mall, historical site, city, wildlife area). At this stage, sample selections were selected by both researchers in which the most prominent elements of the landscape are seen. After their consent for participation was obtained, the completion of the survey took approximately 12 minutes.

In the study, the data were collected by survey using the quantitative research method. For data analysis, multinomial logistic regression analysis was executed to figure out the relationship between the participants' level of CTN by gender and their landscape preferences. In social sciences, logistic analysis and multinomial logistic regression analysis are the appropriate techniques when the dependent variable is categorical (Cameron & Trivedi, 2010). Multinomial logistic regression analysis is a technique that allows comparisons between disparate categories in studies where the dependent variable consists of more than two unsorted categorical structures (Bayaga, 2010) and clarifies cause and effect relationships between dependent and independent variables (Hosmer et al., 2013).

4. Results

4.1 Connectedness to Nature Scale

The research group consisted of 100 women (47.6%) and 110 men (51.4%), a total of 210 volunteer participants staying in Antalya for tourism purposes. EFA was applied first to test the construct validity of the CTN Scale. Since the 4th, 12th, and 14th items were scored reversely, a conversion process was performed before the analysis. It was observed that three sub-dimensions with eigen values greater than 1.00 were formed for 14 items before rotation in the EFA. The resulting sub-dimensions explain 60.674% of the variance (first sub-dimension 41.26%, second sub-dimension 11.776%, third sub-dimension 7.637% and Cronbach's Alpha coefficient = 0.82). After the procedure to test the validity of the sample size, it was observed that the KMO value was 0.875, Bartlett's Sphericity test and the Chi-Square value were significant ($p < 0.05$), and it was determined that the research data was applicable for factor analysis and factorizable ($X^2=1355.29$, $df=91$), $p < 0.001$) (Tabachnick & Fidell, 2013; Büyüköztürk, 2019).

As a result of the procedure, factor load values of the reverse coded items 4 (I usually feel disconnected from nature), 12 (When I think of my place on Earth, I consider myself the highest member in the hierarchy existing in nature), and 14 (My well-being is independent of the well-being of the natural world) were found to be below 0.40 and were extracted from the scale. The recommended factor load value for a sample between 200 and 250 participants is 0.40 and above (Hair et al., 1998). In addition, it is stated that a factor load ranging between 0.30 and 0.45 can be taken as the lower cut-off point in factor formation in scale studies (Büyüköztürk, 2019). After removing the three items, the reliability value increased significantly (Cronbach's Alpha coefficient =0.89). Varimax vertical axis rotation was performed using principal component analysis. Based on the eigen values and the scatterplot, a one-dimensional solution was determined to be the best. The eigen value of the one-dimensional structure is 5.581, which explains 50.739% of the variance. Table 1 contains information about EFA.

Table 1. Descriptive Information about CTN and Exploratory Factor Analysis

Connectedness to Nature Scale Items	Mean	Standard Deviation	Asymmetry	Kurtosis	Alpha	Factor Loadings
1. I often feel a sense of oneness with the natural world around me.	4.06	0.06	-0.820	-0.195	0.75	0.82
2. I think of the natural world as a community to which I belong.	4.13	0.06	-0.982	0.218	0.76	0.83
3. I recognize and appreciate the intelligence of other living organisms.	4.30	0.05	-0.964	0.852	0.64	0.72
5. When I think of my life, I imagine myself to be part of a larger cyclical process of living.	3.91	0.05	-0.405	-0.102	0.65	0.73
6. I often feel a kinship with animals and plants.	4.28	0.05	-1.091	1.352	0.60	0.67
7. I feel as though I belong to the Earth as equally as it belongs to me.	4.07	0.06	-0.751	0.121	0.80	0.86
8. I have a deep understanding of how my actions affect the natural world.	4.22	0.05	-1.145	1.368	0.41	0.50
9. I often feel part of the web of life.	4.12	0.05	-0.594	-0.052	0.81	0.86
10. I feel that all inhabitants on Earth, human, and nonhuman, share a common 'life force'.	4.44	0.05	-1.186	1.443	0.61	0.68
11. Like a tree can be part of a forest, I feel embedded within the broader natural world.	3.48	0.06	0.131	-0.542	0.46	0.54
13. I often feel like I am only a small part of the natural world around me, and that I am not more important than the grass on the ground or the birds on trees	4.01	0.06	-0.460	-0.687	0.42	0.49

Alpha= Adjusted item-total correlation
Source: Own Elaboration

According to Table 1, factor load values of all items are positive between 0.49 and 0.86 ($X^2=1223.23$, $df=55$, $p<0.001$). It can therefore be said that factor load values have a moderate to high level of relationship (Büyüköztürk, 2019). Adjusted item-total correlation values ranged from 0.42 to 0.81. The correlation coefficient indicates a high level between 0.70 and 1.00; a medium level between 0.70-0.30 and a low level between 0.30 and 0.00 (Büyüköztürk, 2019). Therefore, it is seen that the item-total correlation values are at high and medium levels.

To confirm the one-dimensional structure of the CTN scale, confirmatory factor analysis (CFA) was performed with the data obtained from a different data group. The research group was formed of 92 women (54.1%) and 78 men (45.9%), a total of 170 volunteers who were staying in Antalya tourist accommodation establishments. Participants were informed about the study and their approvals were received. The responses to the scale took approximately 10 minutes. The CTN is a five-point scale ranging from "strongly disagree" to "strongly agree" and consists of 11 items (items 4, 12 and 14 were deleted based on the EFA results of validity and reliability of the scale). CFA was executed with LISREL 8.7 to test the one-dimensional structure of the scale. The maximum likelihood method was chosen to test the model and to assess the fit of the model: X^2 , the Comparative Fit Index (CFI), the Goodness of Fit Index (GFI), the Normed Fit Index (NFI), the Non-Normed Fit Index (NNFI), the Standardized Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA) were analyzed. Finally, the Cronbach Alpha reliability coefficient and composite coefficient (CR, compositereliability) of the items were examined.

Figure 1. Path Diagram of the Model

Source: Own Elaboration

Based on CFA, the path diagram of the model is presented in Figure 1. In Figure 1, it appears that factor load values for CFA are between 0.43 and 0.89; error variance values are between 0.21 and 0.82; and all of them reach a significant level. The explained variance and load values are considered sufficient as they are at medium and higher levels (Büyüköztürk, 2019). The Cronbach Alpha reliability coefficient of the scale was calculated as 0.91, and the CR value was calculated as 0.71. It can be stated that the reliability of the scale is high (Büyüköztürk, 2019).

As seen in Figure 1, the error variance values of the 8th and 10th items were equalized to reduce the Chi-Square value. Item 8 (*"I have a deep understanding of how my actions affect the natural world."*) and item 10 (*"I feel that all inhabitants of Earth, human, and nonhuman, share a common 'life force'"*) are located accordingly to conform to the scale. In a one-dimensional structure, the two items are expressions that complement each other and are parallel in terms of commitment to nature. Therefore, the equalization of error variances in CFA is an appropriate operation. Goodness-of-fit values before and after CFA modification are presented in Table 2.

Table 2. Goodness-of-fit Values before and after Modification According to CFA

Goodness-of-fit	Before Modification	After Modification
χ^2	160.04	109.05
Standard Deviation	44	43
$c^2: \chi^2/sd$	3.63	2.53
P	0.0	0.0
GFI	0.85	0.89
CFI	0.95	0.97
NFI	0.93	0.95

NNFI	0.94	0.96
SRMR	0.068	0.055
RMSEA	0.125	0.095
%90 C.J. RMSEA	0.10-0.15	0.073-0.12

Source: Own Elaboration

As presented in Table 2, the rate of the Chi-square value to the degrees of freedom is less than 3 ($\chi^2/\text{sd}=2.53$), which explains that the model is accurate and shows acceptable fit (Kline, 2011). It is seen that RMSEA (0.095), SRMR (0.055), GFI (0.89), CFI (0.97), NFI (0.95), and NNFI (0.96) values are at acceptable values for perfect fit (Hu & Bentler, 1999). Among these fit indexes, RMSEA is 0.06 or less; SRMR is 0.08 or less; GFI, CFI, NFI and NNFI are 0.90 and above, an acceptable fit indicator for the model, and 0.95 and above represents a good fit index (Hu & Bentler, 1999). In addition, the RMSEA and SRMR values for the research model are less than 0.10, indicating that the model is at an acceptable level (Anderson & Gerbing, 1984; Cole, 1987). Thus, based on CFA, it was determined that the factor structure of the scale was acceptable, and the one-dimensional structure suggested by Mayerand Frantz (2004) was compatible with the study.

4.2 The Relations between Tourists' Connectedness to Nature and Landscape Preferences

The research group for this, the main part of the study, consisted of 167 women (47.4%) and 185 men (52.6%) a total of 352 volunteers who were staying in Antalya tourism accommodation establishments. According to the occupational status of the participants, 111 (31.5%) were actively working, 67 (19%) were unemployed, 96 (27.3%) were retired, 78 (22.2%) were students. Tourists who took part in the survey were asked about their landscape preferences (beach, forest, shopping mall, historical sites and wildlife photographs). According to the answers received, 103 (29.3%) of the tourists preferred beaches, 90 (25.6%) preferred forests, 43 (12.2%) preferred shopping malls, 74 (21.0%) preferred historical sites, and 42 (11.9%) preferred to travel to a nature-wildlife landscape. None of the sample group participating in the study chose the city landscape.

In this study, landscape preferences were chosen as the dependent variable for the model. Any categorical group of response variables can be selected as the criterion or reference group: the model fits equally well, achieving the same probability and fit values; only the values and interpretation of the parameters will fluctuate (Schafer, 2006). In this study, the category with the lowest frequency was used (5-wildlife landscape). The findings on the relationship between the participants' level of CTN by gender and their LP are presented in Table 3.

Table 3. Connectedness to Nature (CTN) and Landscape Preferences Model

Landscape Photograph	B	Std. Error	Wald	df	Sig.	RRR Exp (B)
Intercept	13.429	3.737	12.914	1	0.000	
Female	-6.898	4.261	2.621	1	0.105	0.001
Male	0b	.	.	0	.	
Beach						
CTN	-2.800	0.827	11.452	1	0.001*	0.061
Female * CTN	1.316	0.962	1.872	1	0.171	3.729
Male * CTN	0b	.	.	0	.	

Forest	Intercept	6.738	3.769	3.196	1	0.074	
	Female	-3.618	4.326	0.699	1	0.403	0.027
	Male	0b	.	.	0	.	
	CTN	-1.256	0.829	2.299	1	0.129	0.285
	Female* CTN	0.616	0.968	0.405	1	0.524	1.852
	Male* CTN	0b	.	.	0	.	
Shopping Mall	Intercept	13.763	4.032	11.652	1	0.001	
	Female	-13.802	4.698	8.632	1	0.003*	1.013
	Male	0b	.	.	0	.	
	CTN	-3.255	0.915	12.651	1	0.000*	0.039
	Female* CTN	3.299	1.073	9.446	1	0.002*	27.076
	Male* CTN	0b	.	.	0	.	
Historical Sites	Intercept	13.978	3.784	13.642	1	0.000	
	Female	-10.183	4.360	5.456	1	0.020*	3.781
	Male	0b	.	.	0	.	
	CTN	-3.022	0.842	12.892	1	0.000*	0.049
	Female* CTN	2.158	0.986	4.790	1	0.029*	8.658
	Male* CTN	0b	.	.	0	.	

CTN: Connectedness to Nature; Number of Observations: 352; LR $\chi^2(12) = 67.67$; Prob $>\chi^2 = 0.0001$; Log likelihood = 456.628; Pseudo R2 = 0.183, $p < 0.001$

Source: Own Elaboration

In the model related to the participants' level of CTN and landscape preferences, it was verified that there is a significant relationship between gender and CTN ($R^2 = 0.183$, $p < 0.001$). According to the findings, there is a significant relationship between the preferences of the participants for the beach and their level of CTN. The tourists' level of connectedness to nature increases the preference for the beach by 0.061 times. As the tourists' level of CTN increases, their preference for going to the beach also increases.

There is a significant relationship between female participants and their preference for shopping malls. The relative ratio for female participants relative to males would be expected to increase by a factor of 1.013 given the other variables in the model are held constant. In other words, women who prefer the shopping malls landscape are 1.013 times less likely than men to prefer the wildlife landscape.

There is a significant relationship between the preference of the participants for the shopping mall and their level of CTN. The level of CTN of the participants increases their preference to go to shopping malls 0.039 times. As the participants' level of CTN increases, their preference for going to the shopping mall also increases. A significant relationship was observed between female participants' preference for the shopping mall and their level of CTN. The relative risk for female participants relative to males would be expected to increase by a factor of 27.076 given the other variables in the model are held constant. In other words, women who prefer the shopping mall landscape are 27.076 times more connected than men to nature.

According to the model, a significant relationship is seen between female participants and their preference for historical places. The relative risk for female participants relative to males would be expected to increase by a factor of 3.781 given the other variables in the model are held constant. In other words, women who prefer the historical site landscape are 3.781 times less likely than men to prefer the wildlife landscape.

There is a significant relationship between the participants' preference for the historical site and their level of CTN. The level of CTN of the participants increases their preference for the historical place by 0.049. As the participants' level of CTN increases, their preference for historical places also increases.

There is a significant relationship between the preferences of female participants for the historical place and their level of CTN. According to the level of connectedness, the relative risk for female participants relative to males would be expected to increase by a factor of 8.658 given the other variables in the model are held constant. In other words, women who prefer historical sites landscape are 8.658 times more connected than men to nature.

As the participants' level of CTN increases, it is observed that participants prefer the beach (coefficient= 0.061, $p < 0.001$) to the historical place (coefficient= 0.049, $p < 0.001$), and the shopping mall (coefficient= 0.039, $p < 0.001$) at a higher rate. Therefore, their preferences are ranked as beach, shopping mall, and historical place respectively. As the female participants' level of CTN increases, it is seen that they prefer the shopping mall (coefficient= 27.076, $p < 0.001$) to the historical place (coefficient= 8.658, $p < 0.001$) more than men. No significant relationship was found in other variables and H1 and H2 are partly accepted. H3 is accepted.

5. Conclusion

5.1 Theoretical Implication

In this study, CTN levels of domestic and foreign tourists visiting Antalya were measured with the scale developed by Mayer and Frantz (2004). The construct validity and one-dimensional structure of the scale were examined. The validity of the sample size was adequate. Research data were applicable for factor analysis. After removing three items, the scale's reliability value increased significantly. The items' total correlation were between medium (0.30) and high (0.81) level. Based on CFA, the explained variance and load values were meaningful. The factor structure of the scale was acceptable and the one-dimensional structure of the scale was compatible with the study. The results demonstrated that the CTN scale was in a one-dimensional structure and the reliability was high (Cronbach's Alpha coefficient = 0.82).

With the relevant scale, the study tried to predict whether there was any relationship between the levels of connectedness to nature and preferences for wildlife, beach, forest, shopping mall and historical site landscapes. The results indicate that, as the level of CTN increases, tourists prefer beaches, shopping malls and historical places more. There was no relationship between the CTN of tourists and their preference for forest and wildlife in landscape preferences.

Regarding the results of the study, Rogers and Bragg (2012) state that the places where we spend our lives, especially homogenized places such as shopping malls, apartments, towers/skyscrapers, will weaken the sense of belonging and being a part of something. In this context, it can be interpreted that tourists who feel connected to nature, nevertheless, cannot stay away from shopping malls as a way of life. Remembering Verges and Duffy (2010), it may not be possible to determine whether attachment to the surroundings changes as a function of positive and negative interpretations relative to the concepts used. In reality, it may be accepted that shopping malls are a part of life. Moreover, human-place bonds could also play a role in the scene. Vining, Merrick and Price (2008) state that if individuals position themselves as having a self that is independent from the land, they will also think themselves separate from nature. Furthermore, it can be said that if the individual feels an attachment to nature in connection with their beliefs and values, they have the idea that nature is related to people or that people are an integral part of nature (Vining et al., 2008). From this perspective, values and beliefs are a meaningful part of CTN.

However, alienation remains one of the fundamental concepts in tourism research. On the one hand, MacCannell (1976) argues that alienation is in the "lifestyle", not in the life that it represents. Sparks et al. (2014) state that today people prefer a lifestyle that is disconnected from the natural environment and this separation will have dangerous consequences for future generations. Similarly, Rogers and Bragg (2012) state that human societies have been living in wild and natural areas since ancient times, but the rapid rise in urbanization has resulted in the disconnection of people from nature.

On the other hand, Baudrillard (1998) argues that leisure time as a concept is more comprehensible when compared to alienation or work. In the post-Fordist era, abstract social forces and norms have begun to influence the choices and behavior of tourists more. The branding of "most representative"

and “must- see” destinations discourages tourists from exploring a more real world. The preferences and tastes of tourists are now influenced by social media. Thus infrastructure, devices and technology can help travelers access nature (Xu & Li, 2021). For this reason, someone who prefers safer landscapes may still want to be in contact with nature. Thus, it is not inconsistent that tourists who are more connected to nature prefer shopping malls; they may prefer a safe contact with nature, somewhat removed from pure nature. The equivalence of something is perceived through social conditions and preferences are made accordingly. Hence, the lack of an intentional relationship between CTN and forest or wildlife may indicate that participants are alienated from pure nature but still may be in search of its meaning through indirect preferences (see Qiu et al., 2018; Lindberg et al., 2019).

Another result that was obtained from the study shows that as tourists’ CTN increases, their preference for beaches increases. Although there is a tendency towards alternative areas in tourism, the demand for sea, sun and sand tourism has not decreased. Especially with the establishment of many hotels in coastal areas, the high price of sea view rooms compared to other rooms (Mendoza-González et al., 2018), the high demand for tourism from Europe and regions with colder climates to the Mediterranean coasts is among the most important indicators of this (see also, UNWTO, 2022). Moreover, the present study was carried out in Antalya, an important coastal destination for shopping, night life and natural tourism in Turkey and in the Mediterranean region of the country.

As the level of CTN of the participants in the study increases, the probability of choosing historical sites also increases. In the study carried out by Han and Hyun (2017), the importance of how a person defines and names themselves in the world where they expresses themselves naturally is emphasized, and it is stressed that individuals with high CTN tend towards environmentally responsible behaviors. They also concluded that visitors to museums show a high commitment to nature and environmentalist behaviors (Han & Hyun, 2017). The emotional value and experiences associated with these places may not affect their preferences for natural landscapes, even if they are sensitive to the environment. In this context, as the CTN level increases, the preference levels for the beach, historical place and shopping center all increase, showing that the values and attitudes of tourists are similar towards artificial and natural landscapes. It should be understood from this finding that a tourist who prefers to be in a shopping mall may also be connected to nature and it is clear that this would lead to misleading results if landscape preferences were typically differentiated as artificial/natural and a conventional estimation of people’s CTN levels was made on this basis.

According to the results of the study, no relationship could be found between the tourists’ CTN levels and their wildlife or forest preferences. It can be said that many independent variables, such as beliefs, values and living environment can be influential in making sense of the world and place. Sæþórsdóttir and Saarinen (2016) state that wildlife is a subjective concept in which the elements of culture, place and time are influential in the interpretation of wildlife by individuals. Wild environments that are commoditized for tourists who want to have authentic experiences in tourism, and that are shaped by socio-cultural mechanisms and the value attributed to them (Vidon et al., 2018) are interesting for some members of society, for other people wild environments feel untouched and do not create a feeling of being at home; they are seen as areas away from human influence (Vining et al., 2008). Wild areas can also be seen as scary and unsafe places for some people. In this context, tourists’ need for safety has been the subject of many studies in tourism (e.g., Boakye, 2012; Seabra et al., 2013; Zou & Meng, 2020).

At this point, when the untouched nature of wild and protected environments encounters human influence or a venue is constructed specifically for tourism activities, it is still controversial whether they will maintain their features. The conditions in the pandemic that started in 2020 have brought up many discussions about human intervention in nature and the limit of human-nature relations. Furthermore, legibility factors play an important role in environmental preferences (Abello & Bernaldez, 1986) and forests and wildlife tours could be unsuitable for this situation. Moreover, the anthropocentric view of tourists could be prevalent and this view might restrain the tendency of their preferences. Moreover, it is thought that the fact that men prefer wildlife more than women is related to aspects of male tendencies that are different from female tendencies. This result can relate to differences in perception between males and females, as found in Yu’s study (1995).

When the overall findings are assessed, it is observed that the level of CTN is high and that tourists identify themselves in this way. Also among the results obtained from this study, the preferences for shopping malls, beaches and historical sites among tourists who are connected to nature come to the fore. In particular, studies to be carried out on the commitment to nature may reveal “welfare-enhancing” results, both in terms of the individual and the society and in terms of the region where tourists are welcomed. For this reason, studies on the attitudes of tourists towards the environment are of great importance in terms of both theory and practice. In this context, it is thought that the present study will contribute to the literature.

Furthermore, testing the CTN scale in the Turkish context is another meaningful contribution of the study. The fact that the study was conducted together with the relationships between landscapes and CTN, which is also a precursor of environmentally responsible behavior, is noteworthy in terms of showing that CTN cannot directly predict landscape preferences. In this respect, it has been revealed that there are indirect relations between landscape preferences and CTN.

5.2 Practical Implication

For practical implications, in more preferred areas such as beaches, historical areas and shopping malls, reminders or signboards may be placed with little anecdotes from nature and thus, a healthy perpetual cycle can be provided from a communication perspective. Sensitivity to nature may be enhanced from an interactional perspective through interaction ritual chains and emotional energy (Goss, 2008). From the tourism management perspective, in designing historical sites, shopping malls and beaches, eco-friendly designs may be adopted. They may become symbols of environmental consciousness with eco event organizations and from the organizational and marketing perspective. On the other hand, wildlife and forest areas may be both protected and opened to tourists under regulation. For the tourists, the ideal has to be special areas for experiencing the peace of nature, but for a balanced relationship between nature and humans in cases of environmental subversion, the needs of nature should not be forgotten. In adopting environmental behaviour, tourists should be informed about the sensibility of nature and reminded of the need for a balanced relationship in both host and guest countries. Mindful learning experiences (Wang et al., 2016) will contribute to this. Host countries should promote an environment-friendly image and the guests should also sustain environmentally sensitive behaviours in the host country.

5.3 Limitations and Recommendations

There are also limitations of the study. The English language of the survey might not be well understood by the participants. In addition, some forms can both take place in nature and be cultural, like a natural museum. The study did not test this. Typical forms of the landscapes were presented to participants in the form of single-dimensional landscape preference photographs. Moreover, studies can be carried out in a variety of locations, and with a range of participants; the current study was conducted at a single location and the participants were all tourists who were staying at tourist accommodation establishments. It would also be beneficial to carry out the study in different international destinations where nature-based or wildlife tourism is dominant, such as among visitors to national parks.

In addition, although it is emphasized that the scale developed by Mayer and Frantz (2004), which was used in the current study, has experiential, affective and cognitive features, the cognitive side of the statements in the scale predominates (Sparks et al., 2014). Sparks et al. (2014) state that the concept of connectedness cannot turn into behavior or attitude in every area (it may not trigger a planned behavior), and identities will be an important element in measuring connectedness. In this regard, the validity of scales other than the scale used in the current study can be tested. In addition, the landscape preferences used in the study should be categorized and investigated in a more systematic way in different types of destinations, similar to the study of Lukoseviciute & Panagopoulos (2021). More empirical studies in the field of tourism-nature connectivity will enable the collection of more comprehensive and generalizable results and further development of theories.

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ORCID

Aslı Özge Özgen Çiğdemli  <https://orcid.org/0000-0002-6146-5552>

Ceren Avcı  <https://orcid.org/0000-0002-9937-7531>

Notes on contributors

Aslı Özge Özgen Çiğdemli graduated from Ankara University, Faculty of Political Sciences, Department of International Relations in 2006. She took her PhD degree in 2016 in Hospitality and Tourism Management from Akdeniz University; her dissertation was “The Comparative Analysis of Mediterranean Cruise Destinations: The Position of Turkey”. Dr. Çiğdemli is an Assistant Professor in the Osmaniye Korkut Ata University, Faculty of Kadirli Applied Science, Department of Recreation Management. Her main areas of interest are tourism management, cruise tourism, technology and tourism, consumer behavior in tourism.

Ceren Avcı completed her undergraduate education at Balıkesir University School of Tourism and Hotel Management in 2008. She completed her Master's thesis and dissertation on Tourism Management at Gazi University Faculty of Tourism. The subject of her Master's thesis was occupational health and safety and the subject of the doctoral dissertation is on spatial relations in urban tourism. Avcı worked as a research assistant at Gazi University Faculty of Tourism, Department of Tourism Management between 2012 and 2017. She has been working at Şırnak University since 2017. Her academic interests are tourism philosophy, tourism psychology and tourism sociology.