

## **EXAMINING THE NATURE INVOLVEMENT AND GREEN CONSUMPTION VALUES OF NATURE PHOTOGRAPHY TOURISTS**

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**Abstract:** This study examines the nature involvement and green consumption values of nature photography tourists. A questionnaire, developed and based on the literature, was used to collect data from the members of nature photography associations located in Adana and Mersin, Turkey. A total of 277 usable responses were obtained. Results suggested that attractiveness, identity expression and social bonding were the main involvement reasons for nature photographers. Results also suggested that there was a strong correlation between nature photography tourists' nature involvement and their green consumption values. Conclusions and implications were drawn based on the findings.

**Key words:** nature, alternative tourism, photography, involvement, green consumption values

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### **INTRODUCTION**

Over the recent decades, it has been observed that people are much more concerned about alternative forms of tourism rather than travelling in masses. People increasingly demand services that would allow them to enjoy aesthetic, authentic, and rejuvenating experiences on the basis of their personal interests. Similarly, awareness of environmental problems and natural resources have also given rise to alternative forms of tourism. Consequently, a number of tourism types have arisen as alternatives to mass tourism, which are referred to as 'alternative' tourism (Dowling & Fennell, 2003).

Although special interest tourism has emerged as a distinct product in the 1980s, it was a neglected area for both tourism managers and researchers until 1990s (Brotherton

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& Himmetoglu, 1997). However, special interest tourism as an alternative form of tourism is expected to experience a boost as long as its importance in tourism marketing and its economic impacts are appreciated (McKercher & Chan, 2005). Therefore, developing products and services tailored according to the needs and expectations of travelers in search of alternative experiences becomes vital for the success of destinations.

Participants of special interest tourism are observed to have different profiles and motivations compared to mass tourists. Special interest tourists' motivations and decisions are shaped by their special interest when it comes to the attributes of the destination (Trauer, 2006). According to Swarbrooke and Horner (1999), special interest tourists are motivated by their desire to visit places in order to enjoy their special interests or hobbies. As such, special interest tourists travel in smaller groups, are members of middle to upper income groups, and have lower price sensitivity. They are also experienced, extroverted and adventuresome people in search of novel experiences and destinations unlike the mass tourists (Brotherton & Himmetoglu, 1997). Studies on special interest tourism suggest that these tourists travel more frequently, spend more, stay longer and participate in more activities compared to mass tourists (Mackay et al., 2002; Sezgin & Yolal, 2012). Regardless of the motivation, expectation and involvement behind travelling, photography plays a fundamental role in tourism (Scarles, 2010), and special interest tourism is not an exception.

As Haldrup and Larsen (2003: 23) note, taking photographs is an emblematic tourist practice. Therefore, tourism and photography practices of tourists have been an important topic for tourism, anthropology and sociology scholars (Hamond, 2001; Gillespie, 2006; Brickell, 2012). Several studies examined the effect of tourist photographs on attitudes towards the destination and the destination image (Human, 1999; MacKay & Couldwell, 2004; Hunter, 2008; Kim & Stepchenkova, 2015). There is also a large body of research on tourist-host interaction or picturing the others (Cohen et al., 1992; Gillespie, 2006; Caton & Santos, 2008).

As a result of increasing interest into photography, a boost in photography tours has been observed, and many travel agencies have included photography tours into their product range. Similarly, photography has been one of the pioneering activities in which tourists are involved in (Scarles, 2012). Moreover, the act of placing nature photography as the prime reason to take a tour may be an important social activity for the tourists (Markwell, 1997). This tendency can be explained by the involvement theory.

The involvement theory suggests that both the hedonic value and the symbolic or sign value of the product class are important antecedents of involvement (Beatty et al., 1988). According to the theory, highly involved people engage in certain behaviors, such as attending events, examining new services, showing interest in service or product categories and conducting ongoing searches (Beatty et al., 1988). Similarly, tourists' green consumption values and their nature involvement have strong influences on their use and perception of nature (Moisander, 2007) as a photographic object. While tourist photography is examined in various contexts, such as social and cultural consequences on the local populations, little attention has been given to the nature involvement of nature photographers and their green consumption values during nature photography tours. Therefore, this study attempts to examine nature involvement and green consumption values of nature photographers, in an effort to contribute to the growing body of literature on this phenomenon. A comprehensive review of nature photography, involvement and green consumption values literature is provided in the next section. Thereafter, methodology utilized in this study is described, and the findings of the study are presented. Finally, conclusions drawn on the basis of discussion and implications for the destination managers are provided along with the study limitations and suggestions for future studies.

## LITERATURE REVIEW

### Nature Photography

Photography is a major force in the manipulation of imagery in travel and tourism, and an important component of the experience itself. Photographs provide the means of recollecting the experiences of those who took the holiday, as well as sharing them with friends and relatives who did not (Garrod, 2007). The camera mediates reality for the tourist; it gives shape to his or her experience (Garlick, 2002), and moreover, it conveys the appearance of participation in the situation (Sontag, 1977). Albers and James (1988) note that travel photography formulates and institutionalizes what tourists see and how they see it and further formulate how tourists know and understand what they see. Photography is a socially constructed medium for communicating imagery in travel, and such an imagery is crucial for the tourists in order to remember the experiences and show them to others. According to Kim and Stepchenkova (2015), tourist photographs project organic destination images which are interpreted on the receiving end of the communication channel by potential tourists, influencing their tourism-related attitudes and affecting their behavior. Photography's important role in tourism (Albers & James, 1988) can be attributed to tourists' interactions with nature and environment (Garlick, 2002). Photography helps tourists to verify their participation to a special event, an occurrence or a destination, and to document their remembrance and experiences. Therefore, tourists are mostly characterized by their cameras (Sontag, 1977; Chalfen, 1979).

Although a plethora of studies have examined the relationship between photography and society, there is limited research solely focusing on photography and tourism (Sontag, 1977; Chalfen, 1979; Albert & James, 1988; Teymur, 1993; Markwell, 1997; Garlick, 2002). This may be explained by the fact that photography-based tourism has not been evaluated as a distinct tourism market segment (Palmer & Lester, 2008).

In search of authenticity, tourists seek items to gaze upon that conform to the representations of places and cultures they have internalized from home, and then record them (typically with their cameras), thus replicating and reinforcing extant perceptions (Caton & Santos, 2008). Moreover, tourist photography can be regarded as a ritualized activity, inherent in the activity of travelling, more than a goal in itself (Cederholm, 2004). Further, Cederholm notes that taking photographs has its norms and conventions. As such, tourists should take a picture of those icons or destination markers which are regarded as typical for a place. For example, people may have difficulty in understanding whether someone has visited Paris or not unless a picture of the Eiffel tower is shown in their travel photographs collection. Photography is first and foremost for remembering the framed moment. Garlick (2002) explains that photography has great significance on memory due to its intrinsic relation to time and space. However, authors also suggest that, due to recent advances in photographing and sharing technologies, it also acts as a communication and identity formation tool (Garry & Gerrie, 2005; Van Dijck, 2008). In this vein, Van Dijck (2008) explains that communication and identity formation are not novel uses but have always been intrinsic functions of photography. The construction of identity involves a relation to the past, whereby events located in another time and space bring their force to bear on the present (Garlick, 2002). Further, it is expressed that the changing role of photography is part of a complex technological, social and cultural transformation (Van Dijk, 2008). It has to be underlined that these transformations are out of our conceptualization of photography in the context of this article.

Regarding the motivations of tourist photographers, Chalfen (1979) suggests that it is uncertain how much they rely on their cameras to document or 'prove' that they have experienced some degree of authentic native life. For example, in her study on backpackers' photography experiences Cederholm (2004) determined four analytical

themes that backpacker tourists photographed: framing the unique, framing the social scene, catching the moment and the deviants among backpackers. According to the author, the first three indicate the photographic and experiential ideals of the backpackers, and the fourth underlines the norms of the backpacking culture through the narratives on the deviants. Another issue while taking photographs of native life is the willingness of people to be in that frame. In this sense Chalfen (1979) notes that not all people feel the same way about either being photographed or seeing themselves in photographs. He argues that tourists and/or hosts may be exercising conflicting ethnocentric judgements when determining appropriate camera use. In this vein, Crang (1997) suggests that the idea or practice of capturing and accumulating sights suggests opportunities to use the activities of picturing to understand people's relations to landscapes and places.

Overall, it is important to underline the distinction between the tourists that take photographs during their travels and the ones who travel for the purpose of photographing. Understanding this distinction is important for the tourism suppliers. Hence, tourists who travel for taking photos have differing needs and expectations (Palmer & Lester, 2008). These types of tourists can travel individually or they can participate in specific tours organized by specialized travel agencies. Similarly, they can take part in photo-safaris that aim to travel to see and photograph fauna or flora, cultural and folkloric wealth and the native life in a certain area (Akpınar & Bulut, 2010). As such, photography tourists have the chance to directly travel to unique places rather than touring individually, and they can easily overcome transportation, time and financial drawbacks (Batur et al., 2013). In a broader sense, most tourism may be described as nature-based tourism. In this sense, nature-based tourism is primarily concerned with the direct enjoyment or experience of a relatively undisturbed natural phenomenon. Irrespective of their interests, all tourists take photographs while they are touring in nature. As such, nature photography includes the depiction of living, untamed animals and uncultivated plants in a natural habitat, geology and the wide diversity of natural phenomena, from insects to icebergs. According to the Federation of International Artistic Photography (FIAP, 2014) "nature photography is restricted to the use of the photographic process to depict all branches of natural history, except anthropology and archaeology. In such fashion a well-informed person will be able to identify the subject material and certify its honest presentation. Human elements shall not be present, except where those human elements are integral parts of the nature story such as nature subjects, like barn owls or storks, adapted to an environment modified by humans, or where those human elements are in situations depicting natural forces, like hurricanes or tidal waves. Scientific bands, scientific tags or radio collars on wild animals are permissible. Photographs of humans who created hybrid plants, cultivated plants, feral animals, domestic animals, or mounted specimens are ineligible, as is any form of manipulation that alters the truth of the photographic statement".

In essence, nature photography aims to depict living or non-living beings in their natural environment (MEGEP, 2012). It can be argued that nature photography plays an important role to register and promote the natural wealth of destinations, and concurrently helps to create environmental awareness. In line with this, nature photographers are expected to behave responsibly, facilitate the promotion of natural sites, and concentrate on natural problems. Natural responsibility is a prime goal for the nature photographers. In so doing, they try to minimize their impact on the nature while touring.

### **Involvement**

Involvement is defined as the perceived personal importance and/or interest consumers attach to the acquisition, consumption, and disposition of goods or services (Mowen & Minor, 1998). Involvement was an important topic for tourism researchers

during 1990s (Selin & Howard, 1988; McIntyre & Pigram, 1992; McGehee et al., 2003; Gursoy & Gavcar, 2003; Gross & Brown, 2008). Involvement is considered to be linked to consumers' interest, excitement, and enthusiasm for various aspects of the consumption process (Rothschild, 1984). Similarly, Zaichkowsky (1985) defines involvement as the internal attachment of a person towards a certain product / service / place / experience on the basis of his or her needs, personal values or interests. When applied to leisure, involvement is used in reference to people's perceived importance of various recreational activities and associated products, leisure service agencies, or settings (Havitz & Dimanche, 1997). As suggested by involvement theory, involvement occurs when a product is related to important values, need, or the self-concept (Beatty et al., 1988). Further, Beatty et al., note that greater involvement would be engendered by relating important values or the self-concept to the usage of the product.

There are three factors that determine individuals' involvement with a certain leisure activity (Zaichkowsky, 1985) personal, physical, and situational. Personal factors are related to internal interests, values or needs that motivate an individual into a certain object or action. Physical factors stem from the intrinsic attractiveness of the object or action. Finally, situational factors are related to the individual's temporary interest in a certain object or action (Zaichkowsky, 1985). Involvement has also been associated with personal values, ego-involvement, and importance and risk perceptions (Jamrozny et al., 1996). Zaichkowsky (1987) further notes that consumers assign both emotional and rational values to products or experiences.

However, as noted by Gursoy and Gavcar (2003), opinions about the dimensions of involvement are mixed and most researchers agree that the concept has a multidimensional structure. The literature suggests that different situations and contexts that individuals are in affect the level of involvement (Cohen, 1983; Andrews, 1988; Zaichkowsky, 1985). Researchers, who accept involvement as a cognitive state, have tried to measure involvement with variables such as ego, interest, risk perception and importance in purchase behavior. Finally, some scholars argue that it is sufficient to measure the importance of the product for the consumer to understand the involvement level (Arslan & Bakır, 2010). Involvement is classified as low involvement and high involvement (Silayoi & Speece, 2004). In low involvement, consumers do not search extensively for information about the brands, products and services (Kotler et al., 1996). On the other hand, high involvement requires consumers to intensively search and evaluate information before the purchase or consumption. Hence, leisure experiences require high levels of psychological involvement, where involvement is characterized by a narrowing of attention, loss of awareness of time passing, and mood elevation (Mannel, 1980 cf. Havitz & Dimanche, 1990). As such, involvement refers to a temporary experience where one is intensely engaged in a pleasurable activity and other stimuli or stresses which seem to be perceptually screened (Bloch & Bruce, 1984). In this context, photography hobbyists have a strong psychic investment in the activity, a career in developing their skill and shared knowledge base, and identify strongly with others engaged in the activity (Stebbins, 1992). Leisure tourism takes the most diverse forms and enhances, first of all the esthetical potential of the geographical area; it is easily associated with all the other types of tourism and is suitable for all ages (Gozner, 2015). Therefore, photography can be determined as a pleasurable, high involvement state where people devote much effort, time and money in photography and related activities.

### **Green Consumption Values**

Society has become increasingly aware of environmental issues as a result of an industrial manufacturing worldwide (Chen, 2013). Therefore, sustainable production and consumption are major goals for governments, industry players, and researchers.

Although consumption is the keystone towards economic growth, it puts a twofold environmental burden on the natural environment: firstly via the depletion of non-renewable natural resources, and secondly via pollution (Abeliotis et al., 2010). However, Haws et al. (2010) note that consumers are increasingly faced with choices between 'green' products, and more firms manufacture products that are positioned as environmentally friendly. This trend has resulted in green marketing as a reflection of societal marketing whose roots go back to the 1970s (Altunöz et al., 2014). Green marketing is defined by the American Marketing Association (2015) as the marketing activities of products that are presumed to be environmentally safe, and incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, and modifying advertising. Consequently, consumers have become more concerned about whether their consumption decisions would harm the nature or contribute to sustainable approaches (Moisander, 2007).

Running parallel to the above, a study by Gilg et al. (2005) has suggested that green consumption may be more appropriately termed sustainable consumption or a component of any move towards sustainable lifestyles. However, this requires consumer involvement in environmental problems, green consumption and sustainable lifestyles. As such, green consumers search information on the new products, share their knowledge with others, and consider the environmental concerns while making decisions on their purchase behaviors (Çabuk et al., 2008). On the basis of their results, Gilg et al. (2005) conclude that move to sustainability and sustainable lifestyles will be a gradual process incorporating purchase-related and habitual elements that cross conventional behavioral boundaries. However, Kim and Choi (2005) suggest that it is important to increase consumer awareness of the environmental issues, and a continuous effort is needed to achieve a more environmental production and consumption behavior.

As a global activity and dependent on the well-being of the natural resources, tourism requires a productive and rational use of the natural resources (Cetinel & Yolal, 2009). As such, alternative tourism which is consistent with natural, social and community values (Wearing & Neil, 1999) helps to overcome problems associated with mass tourism. In this vein, ecotourism has become increasingly recognized and legitimized as a means of achieving sustainable development in destination areas (Sharpley, 2006). An ecotourist can be identified as a green tourist who has a distinct appreciation towards nature tourism and engages in nature-based activities (Sheena et al., 2015). Ecotourists help the environment and the locals while trying to reduce their impact on the environment because of their social consciousness and responsible attitude (Bădulescu & Bâc, 2009). Within the context of leisure activities, photography can be conceptualized as a pleasurable, high involvement state. Bryan (1979 cf. Bloch & Bruce, 1984) explains that: "As the photographer becomes more involved, there seem to be two divergent directions that his hobby can take. He can become a gadget manipulator or an artist. The former finds fascination in all the equipment available for purchase... In a sense, the camera and its accompanying paraphernalia become ends in themselves". Photography tourists with a higher degree of involvement are even willing to re-enact actions in order to experience the environment from the perspectives of green consumption. Moreover, a study by Mc Gehee et al. (2003) suggests that tourists with higher involvement are more active and willing to participate in activities more frequently, and they spend more at the destinations compared to tourists with lower involvement. Similarly, Pettit and Sheppard (1992) report that those tourists with higher involvement in green consumption also spend more compared to mass tourists. Therefore, understanding the nature involvement dimensions of nature photography tourists and their green consumption values is key for the managers and marketers of nature-based tourism destinations.

## METHODS

### Questionnaire Design

A questionnaire was developed based on the literature. The first part of the questionnaire included 15 items to measure involvement of nature photographers developed from Kyle et al. (2007). Second part of the questionnaire had 6 items to measure green consumption values of the participants and these items were developed from the study of Haws et al. (2010). The scales were measured on a five-point Likert-type scale. Respondents were asked to indicate how strongly they agree or disagree with each item in the scales. The final section of the questionnaire included items to gather information about respondents' demographic characteristics. A pilot test was conducted between the 3<sup>rd</sup> and 15<sup>th</sup> of March 2014. Necessary changes were made on the survey instrument on the basis of pilot test results.

### Data Collection

The study population was comprised of the members of photography associations located in Adana and Mersin, Turkey. This population was comprised of 472 registered members in two photography associations. Data were collected utilizing a self-administered questionnaire from individuals who were registered members of Adana Association of Amateur Photographers (AFAD) and Mersin Association of Amateur Photographers (MFD) between 20<sup>th</sup> of March and 3<sup>rd</sup> of May 2014. In order to increase the response rate, both leave-and-pick (İbeh et al., 2004: 157-163) and web survey were utilized. A total of 332 questionnaires were collected by the end of data collection process. However, 45 were incomplete or inaccurate and thus eliminated from further analysis. As a result, 287 usable questionnaires were retained for the analysis.

### Analysis

Data coding was followed by the controls of accuracy of data coding. Further, data were controlled for missing values. No missing values were detected for the first scale. However, it was seen that only one questionnaire had missing values in the involvement scale, and these values were replaced by the mean values of the scale items. SPSS 19.0 was utilized for data analysis. Since multivariate techniques were planned to be used to analyze the data, multiple outlier analysis was conducted for both scales. Mahalanobis distance was used to find outliers in a set of data. This method measures each observation's distance in multidimensional space from the mean center of all observations, providing a single value for each observation (Hair et al., 2010). Therefore, Mahalanobis distance measure  $D^2$  for both scales were calculated t test approach was preferred for the purpose of detecting multiple outliers. The  $D^2$  measure divided by the number of variables/items involved ( $D^2/df$ ) was approximately distributed as a t-value (Hair et al., 2010). If any  $D^2$  value is greater than t-value determined with a small significance level like  $\alpha: 0,001$ , for the degree of freedom based on the item (variable) numbers is considered as a multiple outlier.

For the first scale of nature involvement, 3 observations of which  $D^2$  were greater than t-value ( $t_{15; 0,001}=3.733$ ) were identified as multiple outliers. Further, in the scale of green consumption values 7 observations of which  $D^2$  were greater than t-value ( $t_{6; 0,001}=5.208$ ) were identified as multiple outliers. They were removed from the data set. Consequently, the analysis was conducted on a sample of 277 surveys. Initially Mahalanobis distance and percentiles  $((j-0.5)/n)$  were estimated in order to conduct multiple normal distribution test. Further, inverse cumulative chi-squared distribution values were calculated on the basis of percentiles. Finally, the data was assumed to be normally distributed if Mahalanobis distance values and chi-square values formed a line on the graph (Kalaycı, 2006; Alpar, 2011). Further, multiple normality test was conducted. Estimated correlation values were found to be 0.982 for the scale of nature involvement and 0.978 for the scale of green consumption values. These values were higher than the recommended values for the degree of freedom (Kalaycı, 2010). As such, the correlation values calculated for both scales were found to be

higher than recommended values at a significance level of  $p = 0.05$ , which means that both scales were multiple normally distributed. The missing value determination and the normality tests were followed by descriptive analysis, exploratory factor analysis and correlations on the basis of study objectives.

### Reliability of the Measures

Reliability analysis of the scales were analyzed initially for the overall scale, then splitting the scale into two (Table 1). Further, odd and even numbered items were also evaluated on the basis of their Cronbach Alpha values. Moreover, item-total correlation coefficients and multiple  $R^2$  were also calculated for the scales. It was seen that 6 itemed green consumption values scale had an item-total correlation value ranging between 0.477 and 0.668, and a multiple predictor ( $R^2$ ) value ranging between 0.250 and 0.504. In line with this, 15 itemed nature involvement scale had an item-total correlation value ranging between 0.638 and 0.784, and a multiple predictor ( $R^2$ ) value ranging between 0.535 and 0.859. It is recommended that item-total correlations should be higher than 0.250 (Kalaycı, 2010: 412) and multiple  $R^2$  values be between 0 and +1, but closer to +1 and not less than 0.300 (Alpar, 2012: 391). In the green consumption values scale all the items had multiple  $R^2$  higher than 0.400 while one item had a value of 0.250. There was no single item that would increase the reliability of the scale when deleted. When overall scale reliabilities of the scales were examined, it was seen that both scales had higher  $\alpha$  values.

**Table 1.** Reliability analysis of the scales

Coefficients	Green consumption values scale	Nature involvement scale
Number of items	6	15
Reliability of the first half of the scale	0.794	0.925
Reliability of the second half of the scale	0.695	0.905
Reliability of the odd numbered scale items	0.636	0.883
Reliability of the even numbered scale items	0.670	0.875
Reliability of the randomly selected 143 questionnaires	0.782	0.942
Reliability of the randomly selected 144 questionnaires	0.850	0.940
Least and highest item-total correlation values	0.477-0.668	0.638-0.784
Negative item-total correlation values	N/A	N/A
Least and highest multiple $R^2$ value	0.250-0.504	0.535-0.859

## RESULTS

Table 2 presents demographic profiles of 277 respondents. Slightly over half of the respondents were male (53.4%) and more than half of them were married (52.7%). A large number of respondents were between 30 to 39 years old (62.1%). Respondents were mostly university graduates (90%). Almost half of the respondents had a monthly income between 751 to 1500 USD. Participants were asked whether they stayed overnight while they were in nature photography tours (Table 3). It was seen that almost 90 percent of the respondents participated in a nature photography tour at least once. It was also found that 42.6 percent of the participants joined a nature photography tour 1 to 3 times and stayed at the places they visited. Similarly, 29.6 percent joined a tour more than 10 times without staying. Most of the participants noted that they had a special training for photography (81.2%). Study results suggested that 74 percent of the respondents bought locally produced products when they were on the photography tour.

Participants reported that they spent at least 10USD and 100USD at most for the local products, and their average purchase was calculated to be 30 USD during a tour. Further, participants reported that they spent 300USD to 7400USD on the equipment, and their average expense was found to be 1588USD. Exploratory factor analysis was



conducted in order to reveal the underlying dimensions of green consumption values (Table 4). The exploratory factor analysis of 6 items of green consumption values yielded a single factor (and explained 53.3 percent of the variance), and labeled as *green consumption values*. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of .814 also indicated that patterns of correlation were relatively compact and yielded reliable factors. Barlett's test results (546,250) indicated the appropriateness of the factor analysis ( $p < 0.000$ ). None of the individual loading was less than 0.50, and the reliability coefficient of the delineated factor was 0.817.

**Table 2.** Demographic profile of the respondents

Gender	N	Percent
Female	129	46.6
Male	148	53.4
Marital status		
Married	146	52.7
Single	131	47.3
Age		
Between 18-29	62	22.4
Between 30-39	172	62.1
Between 40-61	43	15.5
Education		
High school and below	32	11.6
Undergraduate	181	65.3
Graduate	64	23.1
Monthly income (USD)		
Between 300-750 USD	81	29.2
Between 751-1500 USD	138	49.8
More than 1500 USD	58	20.9

**Table 3.** Respondents' participation to nature photography

Frequency	Stayed overnight		Daily	
	N	Percent	N	Percent
Never	26	9.4	2	0.7
1-3 times	118	42.6	68	24.5
4-6 times	66	23.8	55	19.9
7-9 times	34	12.3	70	25.3
10 or more times	33	11.9	82	29.6

**Table 4.** Exploratory factor analysis of green consumption values

Green consumption values	Factor loadings	Eigen values	Variance explained	Mean	Reliability
			3.2	53.341	4.56
I consider the potential environmental impact of my actions when making many of my decisions	0.798			4.52	
I am concerned about wasting the resources of our planet	0.769			4.52	
I would describe myself as environmentally responsible	0.759			4.59	
My purchase habits are affected by my concern for our environment	0.722			4.37	
It is important to me that the products I use do not harm the environment	0.705			4.61	
I am willing to be inconvenienced in order to take actions that are more environmentally friendly	0.615			4.65	

A similar exploratory factor analysis for the 15 nature photography involvement scale resulted in three factors: *attractiveness*, *identity expression*, and *social bonding*. These factors explained almost 77.6 percent of the variance (Table 5). Eigenvalues of these factors ranged from 6.12 to 1.05. Cronbach's alpha coefficients for all three dimensions were greater than 0.7 as suggested by Nunnally (1978). The reliability coefficients for the three factors were 0.929 for attractiveness, 0.925 for identity expression, and 0.850 for social bonding. Each item loaded on a single factor with a loading greater than 0.50. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.894 indicated that patterns of correlation were relatively compact and yielded reliable factors. Barlett's test results (3,566,482) indicated the appropriateness of the factor analysis ( $p < 0.000$ ). The first factor revealed that nature photography played an important role in the lives of the participants. Therefore, this factor was labeled as *attractiveness*. The items under this factor indicated that participants enjoyed and were satisfied by nature photography. The second factor was about how the participants wanted to be understood and perceived by others. In order to be coherent with the previous literature (Selin & Howard, 1988; McIntyre, 1989; McIntyre & Pigram, 1992) this factor was labeled as "identity expression". Finally, the third factor was about social acceptance and social benefits, and labeled as *social bonding*.

**Table 5.** Exploratory factor analysis of nature photography involvement

Nature photography involvement items	Factor loadings	Eigen values	Variance explained	Mean	Reliability
Attractiveness		4.101	29.292	4.33	0.929
Nature photography is one of the most enjoyable things I do	0.873			4.51	
Nature photography is very important to me	0.869			4.46	
Nature photography is one of the most satisfying things I do	0.855			4.36	
I find a lot of my life organized around nature photography	0.764			4.21	
Nature photography occupies a central role in my life	0.727			4.13	
Identity expression		4.067	29.051	3.84	0.925
You can tell a lot about a photographer by seeing them nature photographing	0.855			3.75	
Nature photography says a lot about who I am	0.844			3.86	
When I am in nature photography tours, others see me the way I want them to see me	0.839			3.92	
I identify with the people and image associated with nature photography	0.809			3.73	
When I deal with nature photography, I don't have to be concerned with the way I look	0.789			3.93	
Social bonding		2.698	19.274	4.46	0.850
Most of my friends are in a way connected with nature photography	0.855			4.35	
Nature photography tours provide me an opportunity to be with my friends	0.832			4.52	
I enjoy discussing nature photography experiences with my friends	0.635			4.61	
I can really be myself during nature photography tours	0.540			4.37	
Total variance explained			77.617		.935

Table 6 shows correlations between green consumption values and the dimensions of nature involvement. There was a significant but relatively weak relationship between green consumption value and dimensions of involvement (0.133 to 0.172). On the other hand, results suggested that there was a meaningful and significant correlation between

the dimension of identity expression and attractiveness (0.548), and between identity expression and social bonding (0.578). Similarly, a significant correlation was also found between social bonding and attractiveness (0.679).

**Table 6.** Correlation matrix

	Mean	SD	Attractiveness	Identity expression	Social bonding
Green consumption value	4.56	0.40533	0.133*	0.154*	0.172*
Attractiveness	4.33	0.63874		0.548**	0.679**
Identity expression	3.84	0.82926			0.578**
Social bonding	4.46	0.58652			

\*Correlation significant at  $p < 0.05$

\*\*Correlation significant at  $p < 0.01$

## CONCLUSION

Although tourism and photography practices have been an important research topic, ecotourists' photography practices received little attention from tourism scholars despite the increasing importance of nature and environment in terms of both sustainability of the resources and the tourist destinations. Therefore, one of the major contributions of this study is that it examines nature involvement and green consumption values of nature photography tourists. By examining the participants' demographic characteristics and their photography experiences, this study hopefully will contribute to a growing body of knowledge on the relation of photography and tourism. Further, the study results offer valuable information for the nature based destinations in order to tailor their offerings and attract ecotourists, specifically the nature photography tourists.

Nature photography tourists are younger; most of them are under 40 years old. Gender distribution and marital statuses are quite even, and this profile is consistent with the profiles of participants in rural tourism and ecotourism studies (Park & Yoon, 2009; Wurzinger & Johansson, 2006). Considering the fact that photography is a rather costly hobby, monthly income levels of the participants are higher than the average norm. Similarly, they have higher education levels. While on tours, participants frame natural attractions such as flora, fauna and scenic beauties, they also encounter natural and manmade barriers. The study results demonstrated that green consumption values formed a single dimension. This is to say that green consumption values of nature photography tourists are strongly related to the careful use of both natural and personal resources. This finding is coherent with the study of Haws et al. (2010) suggesting the confirmation of the reliability of the scale.

The green consumption values are strongly related to the careful use of not just collective, environmental resources, but also personal resources (Haws et al., 2010). As such, participants consider the potential environmental impact of their consumption behavior, define themselves environmentally responsible, and appreciate products that do not harm the environment. This suggests several implications for the destination managers and marketers. First, it is important to protect the environment for the sustainability of the resources. This requires a collaborative approach among businesses, decision makers and most importantly, the consumers. Further, promotion of environmentally friendly actions should be encouraged at the destination level.

The results of the exploratory factor analysis showed that attractiveness itself is the prime dimension of nature involvement for the nature photographers. This may also be important for shaping the memories of the trip which is taken home. The importance of those photographs in the lives of people who travel solely for photographing cannot be underestimated. Sonntag (1979) explains that photography is a way to certify the experience: 'taking photographs is also a way of refusing it-by limiting experience to a

search for the photogenic, by converting experience into an image, a souvenir'. Therefore, protection and sustainability of the natural resources and attractions play a crucial role for the success of the destination (Vasvári et al., 2015). The results also indicated that identity expression serves as an important factor for the participants. As Larsen (2006) puts it, 'photograph performances are pleasurable and our holiday photos that celebrate the world's famous places, our achievements and personal relationships are precious belongings'. Similarly, Chalfen (1987) notes that tourist photographs are characterized as an expression of conspicuous success, personal progress and general happiness.

Social significance of photography was clearly supported earlier by Markwell (1997). In coherence with Markwell's discussions, photography seems to be a way of strengthening bonds between the photographers; places visited by the photography, cameras, lenses and related jargon speed up the social interaction among peers. Further, the purpose of nature based tours, namely photography may also serve as a boundary between this group and the less technically oriented group (Markwell, 1997). In line with this, it is also found that social bonding is an important dimension of involvement.

Unexpectedly, dimensions of involvement showed a moderate correlation among each other. It is seen that dimensions of involvement are more important for the nature photography tourists compared to green consumption values. This result suggests that nature photographers participate in photography tours mainly for the social expectations rather than green consumption behaviors. This could be explained by the growing importance of socialization in contemporary society where individuals feel increasingly solitary. Therefore, the socializing role of nature based activities should be augmented while the green consumption values are promoted among the nature photography tourists.

Drawing data from the nature photography tourists in Adana and Mersin, Turkey, this study investigated the involvement levels and green consumption values of nature photography tourists. The findings revealed the relative importance of socializing among the participants. However, the study has some limitations. The primary limitation of the study is its relatively small sample size. Further studies with larger sample size would strengthen the results of this study. Additionally, this study examined solely the involvement and green consumption values of photography tourists. Therefore, similar studies examining the relation of involvement and other variables such as information search behavior, motivation and satisfaction will expand our understanding of nature photography tourists.

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