

The effect of tourists' relationship with nature on global social responsibility awareness within the scope of last chance tourism

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ABSTRACT

Last-chance tourism includes tourists' visits to destinations under the threat of extinction to see them for the last time. In this type of tourism, tourists' nature-protective behaviors can be an essential factor in preventing the rapid deterioration of the region. This study aims to reveal whether the relationship with nature impacts global social responsibility in last-chance tourism. Data was collected within the purposive sample using the questionnaire technique. In the analysis phase, regression analysis was performed to reveal the effect of the relationship with nature on global social responsibility. The findings indicate that self-identity, perspective, and experience, which constitute the sub-dimensions of the relationship with nature variable, significantly affect the ecological behavior sub-dimension of global social responsibility. In addition, experience and self-identity significantly affect action orientation, one of the other sub-dimensions of global social responsibility, and perspective affects altruistic behavior.

KEYWORDS

Last Chance Tourism, Relationship with nature, Global social responsibility

INTRODUCTION

Threats such as global warming, environmental pollution, and destruction pose significant problems for the sustainability of natural resources. Global warming, primarily due to unconscious human activities, causes climate change. This situation affects weather movements, creates seasonal imbalances, leads to rapid consumption of resources, and poses a danger to wildlife (Ahmad et al., 2014). Imbalances in climate movements bring about rapid negative environmental changes. People may want to travel to places they perceive as "endangered" due to the deterioration of the natural environment and the threat of extinction of unique natural beauties and landscapes (Dawson et al., 2011). Last-chance tourism, which emerged in this context, involves tourists traveling to places threatened with extinction due to human interventions or global climate events, with the perception that they may be unable to revisit them (Zerya, 2018). Tourism destinations that are in danger of disappearing, cultural/natural areas, and features of local cultures may stand out as elements that should be seen and experienced by tourists as soon as possible (Dawson et al., 2015). For this type of tourism, areas such as "Alaska, Kilimanjaro, Greenland, Antarctica, Antarctica, Great Barrier Reef" are evaluated, and these places are among the places to be seen for reasons such as the melting of glaciers, loss of corals, etc. (Eijgelaar et al., 2010). The concept of last-chance tourism, which is more prominent with the influence of media and tourism movements, has a strong relationship with the disappearing natural and cultural environment (Hoogendoorn, 2021).

Increased awareness of the negative environmental impacts caused by mass tourism leads to a shift in travel planning towards nature-protective tourism types (Das & Chatterjee, 2015). Experiences gained in nature-based tourism may increase knowledge and sensitivity about the environment (Eijgelaar et al., 2010). In this context, the experiences gained in last-chance tourism offer a vital opportunity to increase individual awareness, especially regarding nature conservation behavior (Paiva et al., 2023). Visitors' relationship with nature is a factor that should be considered in last-chance travel. Because it is thought that visitors who are sensitive about nature may have higher emotional reactions towards these destinations, at the same time, these visitors may be motivated by the desire to see what is happening in destinations that face the threat of extinction. Visitors' perceptions of climate change and their awareness of global social responsibility affect their decision to visit last-chance destinations. While more research is needed on the underlying factors behind these visits, there are suggestions that the primary motivation for travelers may be the need for achievement and fulfillment. At the same time, visitors' desire to support the local people living in this region can also motivate travel (Hindley & Font, 2018).

Global social responsibility is a concept that deals with various issues, especially the use of resources in many fields, such as communication, trade, tourism, etc. (Starrett, 1996). It is a factor with economic, socio-cultural, and environmental dimensions that tourism stakeholders include in their practices at personal, local, regional, or global levels (Paskova & Zelenka, 2019). In this context, the environmental impacts of activities in the tourism industry should be considered. Tourism activities can disrupt the natural ecosystem of travel destinations. Therefore, it is necessary to consider the global social responsibility approach (Pejic Bach et al., 2014). In particular, tourists' awareness of social responsibility is essential in protecting and developing destinations (Luo et al., 2017).

This study aims to reveal whether individuals' relationship with nature within the framework of last-chance tourism impacts global social responsibility awareness. The awareness that people who are related to nature and have global social responsibility who learn about the existence of this type of tourism will prevent the destruction of nature in the coming years reveals the importance of the study. In this context, firstly, a literature review was given about the variables used in the study. The method and findings of the study were explained, and conclusions and recommendations were presented.

LITERATURE REVIEW

Last Chance Tourism Concept and Visitor Profile

Last chance tourism is a niche tourism market that focuses on witnessing and experiencing a place before it disappears. This tourism market can also be called climate change, extinction, apocalypse, dying, endangered, or "see it before it disappears" tourism activity (Piggott-McKellar & McNamara, 2017). Similarly, Denley et al. (2020) refer to the desire and quest of individuals to visit landscapes and see species whose existence is threatened or endangered. Ballantyne et al. (2009) argue that it includes tourists observing, photographing, and interacting with endangered, threatened, or rare environments or individual species. Dawson et al. (2011) use different terms to describe the desire to see a natural feature before it disappears, such as apocalyptic tourism, dark tourism, climate tourism, disaster tourism, or endangered destination tourism. However, last chance tourism is the most commonly used term, and many academic studies and books present various developments on this topic. Within the scope of last-chance tourism, polar bear watching and Antarctic trips are shown as the first tourism activities (Salim & Rayanel, 2020). There are many regions in the world and Turkey where this type of tourism is traveled. Some of these are Arctic, Great Barrier Reef (Australia), Oceania (Great Ocean islands, Australia), Antarctica, Venice (Italy), Everglades (USA), Dead Sea (Israel), Madagascar, Mount Kilimanjaro (Africa), Glacier National Park (USA), Machu Picchu (Peru), İğneada Forests (Kırklareli), Kaz Mountains (Çanakkale Balıkesir), Ermenek Valley (Karaman), Çoruh Valley (Bayburt, Erzurum, Artvin), Macahel (Artvin), Hotamış Reedbed (Konya, Karaman), Kulu Lake (Ankara), Seyfe Lake (Kırşehir), Munzur Mountains (Erzurum, Tunceli), Hasankeyf (Batman), Aras Bird Sanctuary (Iğdır), Köprüçay (Isparta), Tuz Lake (Sereflikochisar) (Cohen, 2017; Kılıç & Yozukmaz, 2020).

Last-chance destinations are often located in climate-sensitive regions requiring long-distance travel. Generally, this tourism activity occurs when destinations face extinction due to increasing impacts on the ecosystem (Miller et al. 2020). Last-chance tourists participating in these activities are highly educated and concerned about nature and climate change. It is stated that tourists with knowledge about climate change have more developed risk perceptions (Groulx et al. 2016). Visitors participating in last-chance tourism are highly educated and concerned about nature and climate change (Kılıç & Yozukmaz, 2020). In addition, Groulx et al. (2019) argue that gender is an essential distinction among last-chance tourists. According to this argument, it is stated that there are gender differences in tourism and the environment, and women are more likely to believe that the carbon footprint will be reduced.

Tourists visiting last-chance destinations are prolonging the extinction period. However, one of the valuable purposes of this activity is to help increase the awareness and conservation actions of visitors to these locations. This can reduce the impacts that lead to the extinction of destinations (Lemelin et al. 2010). However, from another perspective, Thomas (2020) argues that last-chance tourism can destroy places people want to save, which is an ethical issue. There are different perspectives on this tourism activity, with some scholars believing that tourists can save destinations, while others argue that they destroy them. The debate on this issue is still ongoing. However, tourists are expected to be more conscious of these situations that vary from region to region because some regions are at risk even if tourists have a high level of awareness.

Concept of Relationship with Nature

Nature generally refers to many areas, from small urban parks to untouched areas with wild animals and plants (Frumkin et al., 2017). There is an essential relationship between nature and the human spirit. This relationship is of fundamental importance for human and environmental health. People's disconnection from nature can result in physical and mental health problems. These consequences, reflected in their behavior, cause irreversible damage to nature and indirectly to themselves (Pritchard et al. 2019). Similarly, White (2004) states that the loss of relationship with nature due to people not playing outdoor games during childhood plays a significant role in the child's growth and the destruction of the natural environment. Because children who grow up without being aware of nature are less likely to react to the exploitation and destruction of nature. Attachment to nature is a substantial factor in pro-environmental

attitudes and behaviors that positively relate to well-being. The level of people's relationship with nature is directly proportional to the positive values in their attitudes and behaviors (Capaldi et al. 2014). People's interest in nature is of great importance both individually and socially. Being interested in nature means protecting and caring for nature as a whole, considering the places that are not aesthetic or attractive to people. In other words, it is much more than protecting the valuable part of nature for their activities. Therefore, it is argued that the positive attitudes and behaviors of people with a high level of interest in nature can prevent the destruction of nature (Metz, 2017). Nevertheless, Löbler (2017) emphasizes that the relationship between people and nature is poorly understood in sustainable or relationship marketing. Humans often damage nature, yet it continues to provide resources. Humans usually take these resources for granted but cannot survive without using them. In other words, while humans cannot survive without nature, nature can sustain its existence by renewing itself without humans and their artificial productions. Reiser (2017), who evaluates the issue from another perspective, states that nature should not be assessed only with forests and plants. He criticizes that animals, one of the most essential parts of nature, are also protected in zoos, supposedly to save them from extinction. He argues that this is used more as a tourism activity for the entertainment and education of visitors. Animals live unhappy lives in cages and aquariums outside their natural habitats for the pleasure of human eyes. Sometimes, they even become depressed and attempt suicide. Instead of this method, it makes more sense to keep animals under protection in wildlife parks or areas where they are genuinely in touch with nature.

The Concept of Social Responsibility and Global Social Responsibility

Social responsibility, shown under social attitudes and behaviors, expresses good citizenship. While social responsibility is sometimes evaluated in terms of natural persons, it can also be considered within the legal entities created by natural persons (Starrett, 1996). Social responsibility, one of the most important ways to ensure sustainability, refers to adopting basic principles such as accountability and transparency, primarily when evaluating legal entities. Businesses that care about this are expected to be sustainable and prosperous. In 2010, the International Organization for Standardization published ISO 26000 to help assess and implement corporate social responsibility. This standard includes contributing to sustainable development by considering society's health and well-being, meeting stakeholders' expectations, and complying with laws and norms (American Society for Quality, 2021).

Global social responsibility refers to implementing positive attitudes and behaviors towards others in society, not only within traditional borders but also in global societies. In addition to specific legal rules and norms, the moral and social responsibility behaviors of individuals living in a global society are of great importance for developing society and quality of life (Starrett, 1996). Global social responsibility is to empathize with other individuals in society, ensure their welfare, and not violate their rights while advancing their goals. In particular, the fact that the work in corporate life is carried out with this basis in mind shows that the business provides the qualities that the business should fulfill on behalf of society, apart from the profit purpose (Ewest, 2015). Evaluating the issue in terms of people's problems, Nakamura and Watanabe-Muraoka (2006) state that a large part of people's problems are actually due to the changing structure of the globalized society. It is possible to say that globalization has created a single social system in the world due to interdependence on a social and individual basis. In this context, global social responsibility, a concept that links the responsibility of each individual with society, is of great importance in terms of freedom and personal development. Therefore, instilling an awareness of global social responsibility in society from childhood and broadening their perspectives allows for positive social outcomes. It is expected that students and academics within universities, especially those who have set social responsibility as a mission, will not only be made aware of this issue but also take an active role in the process. These individuals are expected to set an example for society and coordinate the activity while globally determining, planning, implementing, and creating roles for social responsibility activities (Jones et al. 2021).

METHOD

Last chance tourism, a type of tourism that people travel to see before the destination disappears, is identified with responsibility due to its structure. Tourists who act in this sense generally have a structure that performs with a certain consciousness to stop or slow the extinction of nature. There are critical emotional factors that mobilize them in this journey.

Based on the above statements, in this study, the effect of tourists' relations with nature on global social responsibility awareness within the scope of last-chance tourism is a significant question mark. In this context, the problem of the research is shaped within the framework of the following question:

- Do tourists' relations with nature within the scope of last-chance tourism impact global social responsibility awareness?

In line with this problem, the study aims to investigate the impact of tourists' relations with nature on global social responsibility within the scope of last-chance tourism. The questionnaire technique, one of the quantitative research methods, was used in the study. The participants were first shown a 7-minute video about last-chance tourism destinations in the data collection process. In the video, there are ten destinations that are in danger of extinction. These are the Great Wall of China, the Alps, the Alaskan Tundra, the Taj Mahal, the Congo Basin, the Great Barrier Reef, Venice, Madagascar, Maldives, and Dead Sea-Lut Lake (link is in the bibliography). After watching the video, the participants were asked to complete the questionnaires. In the questionnaires, Nisbet et al. (2009)'s Relationship with Nature Scale and Kılınç and Başer (2015)'s Global Social Responsibility Scale were used.

Last-chance tourism is an unknown tourism activity for many segments of society today. People are also unaware that destinations are disappearing and that humanity is responsible for this. When the literature is examined, it is seen that although there have been studies on last-chance tourism in recent years, they need to be more comprehensive. This study aims to enable people who are related to nature and have a global awareness of social responsibility to discover themselves and understand last-chance tourism with the video shown.

This issue is closely related to the whole country. However, to measure the awareness here, the participants in the sample should have a certain level of education. Therefore, all people living in the country with a Bachelor's degree and above constitute the population. Since it was impossible to reach the entire universe, it aimed to reach the number representing the universe through purposive sampling. In this context, data were collected from 305 people in the sample, and the analysis phase started. The level of education was a substantial limitation in the research because the participants are expected to have reached a certain level of competence to feel something about the video they watched and get an idea about it.

Research Model and Hypotheses

In this study section, hypotheses are put forward with their justifications, and the model is created. In this context, it is tried to answer why these hypotheses were established based on previous studies.

Groluxa et al. (2019) emphasize the importance of positioning last-chance tourism in terms of not choosing destinations that threaten the climate in the face of a tourism market where consumption is normalized in socio-economic and environmental terms. In other words, it emphasizes the importance of creating a new positioning by reaching out to responsible groups to prevent environmental disasters. In addition, Piggott-McKellar and McNamara (2017) state that tourists who seek last-chance tourism activities are more environmentally conscious and responsible. In their study, Piggott-McKellar and McNamara (2017) focused on the "experience" seeking of tourists visiting last-chance tourism destinations. They also found that tourists seeking last-chance experiences are more environmentally conscious and have higher levels of concern about the environment. In addition, Grolux et al. (2016) argue that motivation is an essential factor in last-chance tourism. Based on these statements, the following hypothesis was developed based on the model in Figure 1.

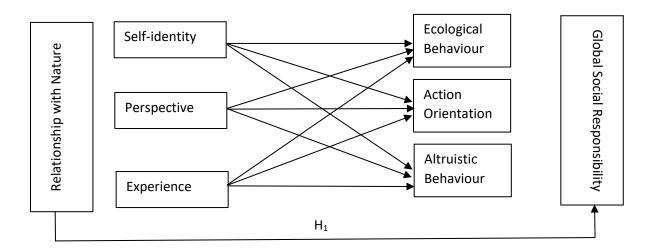


Figure 1 Research Model

H1: Relationship with nature has a statistically significant effect on global social responsibility behavior.

H1a: Self-identity, one of the sub-dimensions of the relationship with nature, has a statistically significant effect on ecological behavior, a sub-dimension of global social responsibility.

H1b: Perspective, one of the sub-dimensions of the relationship with nature, has a statistically significant effect on ecological behavior, a sub-dimension of global social responsibility.

H1c: Experience, one of the sub-dimensions of the relationship with nature, has a statistically significant effect on ecological behavior, a sub-dimension of global social responsibility.

H1d: Self-identity among the sub-dimensions of relationship with nature has a statistically significant effect on action orientation, a sub-dimension of global social responsibility.

H1e: Perspective, one of the sub-dimensions of the relationship with nature, has a statistically significant effect on action orientation, a sub-dimension of global social responsibility.

H1f: Experience, one of the sub-dimensions of relationship with nature, has a statistically significant effect on action orientation, a sub-dimension of global social responsibility.

H1g: Self-identity among the sub-dimensions of the relationship with nature has a statistically significant effect on altruistic behavior, a sub-dimension of global social responsibility.

H1h: Perspective among the sub-dimensions of relationship with nature has a statistically significant effect on altruistic behavior, a sub-dimension of global social responsibility.

H1i: Experience, one of the sub-dimensions of the relationship towards nature, has a statistically significant effect on altruistic behavior, a sub-dimension of global social responsibility.

FINDINGS

This study investigated the effect of tourists' relationship with nature on global social responsibility awareness. Partial least squares structural equation modeling (PLS-SEM), which does not require multivariate normal distribution assumption, was used to fit the model. The effect of 3 dimensions under the relationship of tourists with nature on four global social responsibility awareness variable sub-dimensions was examined. The data were analyzed using Smart-PLS 4 statistical software.

Model Validity

Before the analysis of the structural model created to measure the relationships between the variables in this study, the validity and reliability studies of the variables in the study were

analyzed. Within the scope of validity and reliability studies, internal consistency reliability, convergent validity, and discriminant validity were evaluated. Cronbach's alpha and composite reliability (CR) coefficients were analyzed for internal consistency reliability. Factor loadings and average variance explained (AVE) values were used to determine convergent validity. Factor loadings ≥ 0.70 , Cronbach Alpha and composite reliability coefficients ≥ 0.70 , and average variance explained ≥ 0.50 are expected to be realized. Items with factor loadings between 0,4 and 0,7 can remain in the model in line with CR and AVE values (Hair et al., 2014).

Since all of the variables in the research model had ≥4 items, **Confirmatory Tetrad Analysis (CTA)** was performed to determine whether the indicators of these variables were reflective or formative. After the analysis, "Cl low" and "Cl up" values were checked in the items related to the relevant variables. If there is a value of "0" between "Cl low" and "Cl up" values in at least one row, the indicators are considered to be reflective (Yılmaz et al., 2024, p. 103). As a result of the analysis, it was found that there was a value of "0" between "Cl low" and "Cl up" values in the values of all variables. Therefore, the indicators of the relevant variables are reflective and suitable for partial least squares structural equation modeling.

After the CTA analysis, reliability and validity analyses of the existing structures in the study were performed. In this context, firstly, factor loadings were checked. Ten items with factor loadings less than 0,4 (N1, N9, N14, N16, N18, G13, G15, G21, G26, and G27) were removed from the model, and the analysis was redone. In order to decide whether the items with factor loadings between 0,4 and 0,7 should remain in the model, CR and AVE values were examined. AVE values of the variables should be above 0,5. In variables with AVE values below 0,50, items with low factor loadings were evaluated, and items that did not contribute to the model (17 items in total) were removed. Table 1 shows the results of the internal consistency reliability and convergent validity of the constructs in the study.

When the results of the measurement model are analyzed, it can be said that internal consistency reliability is ensured since the Cronbach's Alpha coefficients of the constructs of the items in the model are between 0,662 (=,60 is accepted for the 2-item dimension) and 0,923 and the CR coefficients are between 0,686 and 0,926. At the same time, since the factor loadings were between 0,545 and 0,853 and the AVE values were between 0,507 and 0,567, it can be stated that convergent validity was achieved.

HTMT criterion was used to determine the discriminant validity of the measurement model. HTMT (Heterotrait-Monotrait Ratio) expresses the ratio of the mean of the correlations of the expressions belonging to all variables in the research (the heterotrait-heteromethod correlations) to the geometric means of the correlations of the expressions belonging to the same variable (the monotrait-heteromethod correlations). The HTMT value should theoretically be below 0,90 for close concepts and below 0,85 for distant concepts (Yılmaz et al., 2024). Table 2 shows the HTMT values.

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Table 1.

Measurement Model Results

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		Factor	Cronbach's		
Variable	Expression	Loading	alpha	CR	AVE
Self-identity	N4	0,627			
	N5	0,789	0,662	0,686	0,508
	N11	0,683			
Perspective	N12	0,677	0,702	0,704	0.507
	N13	0,632	0,702	0,704	0,507
Experience	N20	0,630	0.606	0,701	0,537
	N21	0,704	0,696		
	G1	0,792			
Action Orientation	G5	0,739			
	G6	0,558			
	G9	0,853			
	G10	0,640			
	G14	0,808			
	G16	0,706			
	G19	0,724	0,923	0,926	0,514
	G24	0,545			
	G28	0,649			
	G30	0,801			
Ecological Behaviour	G2	0,710			
	G15	0,781	0.767	0.760	0.504
	G25	0,671	0,767	0,769	0,521
Altruistic Behaviour	G11	0,745	0,724	0,724	0,567
AILI UISLIC DEHAVIOUI	G18	0,761	0,724		

When the values in Table 2 are analyzed, the HTMT values are below the threshold value. In other words, according to the findings in the table, discriminant validity is provided.

Table 2.

Discriminant Validity Results (HTMT Criterion)

	Self-identity	Perspective	Experience	Action Orientation	Ecological Behaviour	Altruistic Behaviour
Self-identity						
Perspective	0,266					
Experience	0,587	0,522				
Action Orientation	0,634	0,182	0,667			
Ecological Behaviour	0,130	0,783	0,418	0,133		
Altruistic Behaviour	0,608	0,346	0,739	0,675	0,261	

Evaluation of the Structural Model

The PLS-SEM algorithm was used to calculate the structural model's R^2 and effect size (f^2), and Blindfolding analysis was performed to estimate the predictive power (Q^2). The R^2 , f^2 , Q^2 , and VIF values of the structural model results are presented in Table 3.

Table 3.
Structural Model Results

Structural Model Nesalts				
RELATIONSHIPS	VIF	R^2	f ²	Q^2
Experience -> Action Orientation	1,804		0,182	0,318
Perspective -> Action Orientation	1,075	0,484	0,009	
Self-identity -> Action Orientation	1,900	,	0,134	
Experience -> Altruistic Behaviour	1,804		0,001	0,304
Perspective -> Altruistic Behaviour	1,075	0,633	1,412	
Self-identity -> Altruistic Behaviour	1,900	,	0,034	
Experience -> Ecological Behaviour	1,804		0,191	
Perspective -> Ecological Behaviour	1,075	0,660	0,179	0,370
Self-identity -> Ecological Behaviour	1,900		0,301	

In the evaluation phase of the structural model, VIF (Variance Inflation Factor) values were first analyzed. As seen in Table 3, VIF values below 5 indicate no multiple internal relationship problem between variables (Yılmaz et al., 2024). When the R2 values obtained from the model were examined, it was determined that the model explained the action orientation variable by 48%, the altruistic behavior variable by 63%, and the ecological variable by 66%. In the evaluation of the effect size coefficient, f2 values were analyzed. An effect size coefficient (f2) of 0,02 and above can be considered low, 0,15 and above as medium, and 0,35 and above as high (Cohen, 1988).

When Table 3 is examined, it is seen that the effect of the self-identity dimension on action orientation is high; the impact of the experience dimension on action orientation and the effects of experience, perspective, and self-identity dimensions on ecological behavior are medium; and the impact of self-identity dimension on altruistic behavior is low. It was determined that the perspective dimension did not affect action orientation, and the experience dimension did not affect altruistic behavior. When the predictive power coefficients (Q2) calculated for the dependent variables are greater than zero, the structural model can predict the dependent variables (Hair et al., 2014). The fact that the Q2 values in Table 3 are greater than zero indicates that the structural model can predict global social responsibility variables.

The fit criteria for evaluating the structural equation model result in SmartPLS are d_ULS, d_G, SRMR, and NFI values. d_ULS and d_G are defined as the square of the Euclidean distance and the square of the shortest distance between two points. When the difference between the correlation matrix of the model and the empirical correlation matrix is statistically insignificant (p>0,05), it is stated that the model is appropriate. d_ULS (1,638) and d_G (0,437) values are statistically significant since they are >0,05. The SRMR value is expected to be less than 0,08 for the model to have an acceptable fit. SRMR value for the model was calculated as 0,077. The chisquare value was calculated as 717,639. The NFI value is expected to take values between 0 and 1. The NFI value close to 1 indicates that the model fits well. The NFI value of the model was calculated as 0,789.

Path Coefficients and Hypothesis Testing

Bootstrap analysis was performed to test the structural relationships in the model (hypothesis test) and to evaluate the statistical significance of the indicators in the model. The structural equation model created to test the research hypotheses is shown in Figure 2.

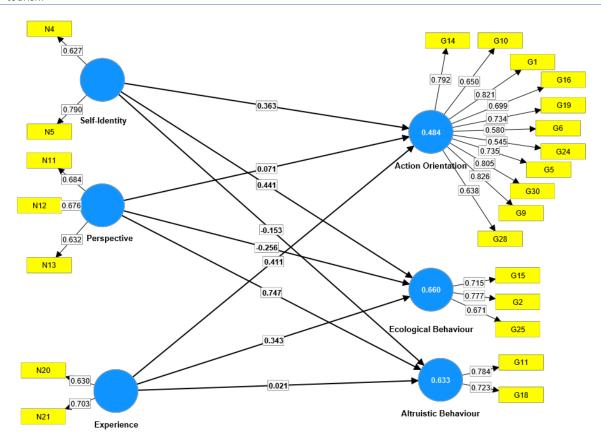


Figure 2. Detailed PLS-SEM Diagram of the Model

The path coefficients are presented in Table 4 according to the results of the bootstrap analysis.

Table 4.

Path Coefficients

RELATIONSHIPS	Standardized β	Standard Error	t value	p- value	Result
Experience -> Action Orientation	0,411	0,174	2,370	0,018*	Supported
Perspective -> Action Orientation	0,021	0,157	0,131	0,896	Unsupported
Self-identity -> Action Orientation	0,343	0,203	1,688	0,091	Unsupported
Experience -> Altruistic Behaviour	0,071	0,058	1,226	0,220	Unsupported
Perspective -> Altruistic Behaviour	0,747	0,096	7,772	0,000*	Supported
Self-identity -> Altruistic Behaviour	-0,256	0,095	2,707	0,007*	Supported
Experience -> Ecological Behaviour	0,363	0,176	2,061	0,039*	Supported
Perspective -> Ecological	-0,153	0,172	0,893	0,372	Unsupported
Self-identity -> Ecological	0,441	0,221	1,994	0,046*	Supported

^{*}p<0,05 Significant

According to the results, the relationship with the nature-experience dimension positively and significantly affects the action orientation variable (Experience ->Action Orientation: 0,411; t=2.370; p=0,018). A one-unit increase in the experience variable increases the action orientation behavior by 0,411 units. Similarly, the relationship with the nature-perspective dimension

positively and significantly affects the altruistic behavior variable (Perspective -> Altruistic Behaviour: 0.747; t=7.772; p=0.000). An increase of one unit in the perspective variable increases the altruistic behavior variable by 0.747 units. The relationship with the nature-self-identity dimension negatively affects the altruistic behavior variable (Self-identity -> Altruistic Behaviour: -0.256; t=2.707; p=0.007). A one-unit increase in the self-identity variable decreases the altruistic behavior variable by 0.256 units. Relationship with nature- experience dimension positively and significantly affects the ecological behavior variable (Experience -> Ecological Behaviour: 0.363; t=2.061; p=0.039). A one-unit increase in the experience variable increases ecological behavior by 0.363 units. Relationship with nature-self- identity dimension affects ecological behavior variable Self-identity -> Ecological Behaviour: 0.441; t=1.994; p=0.046) positively and significantly. A one-unit increase in the self-identity variable increases the ecological behavior variable by 0.441 units. In the related hypotheses, alternative hypotheses were supported, and null hypotheses were rejected. In the other relationships in the table, alternative hypotheses were not supported.

CONCLUSION AND RECOMMENDATIONS

Last-chance tourism refers to visiting destinations facing extinction. Tourists participate in this type of tourism in two ways. Those with a certain level of consciousness want to visit the destination to prolong its existence or save the region. Another group acts to see the disappearing region for the last time and unintentionally accelerates its extinction with the excessive tourism it creates. For this reason, evaluating the possibility that the planned last- chance visits may damage the weakened destination is crucial.

This study focuses on the impact of the relationship with nature on global social responsibility within the scope of last-chance tourism. In this direction, a video about endangered destinations was shown, and data were collected using a survey technique. It was deemed appropriate to sample people above a certain level of education so that they would know about the disappearing destinations in the video and respond in this context. In the study using the purposive sampling method, participants with the lowest undergraduate education level were included. Since the population's size is unknown, the judgmental sampling method, one of the non-probability sampling methods, was used in the study. The judgmental sampling method is a method in which the researcher determines the sample suitable for the research. Then, in analyzing these questionnaires, explanatory factor analysis, reliability, and regression analysis were performed to measure the effect of variables on each other.

The study shows that the sub-dimensions of the relationship with nature (self-identity, experience), which are independent variables, significantly affect ecological behavior, one of the sub-dimensions of global social responsibility. On the other hand, perspective does not have a statistically significant effect. From this point of view, people with high self-identity may be not indifferent to and support the solution of global problems. These people are aware of protecting the environment and tend to play an active role in volunteer work even if they do not have a complete solution. According to the results, people who evaluate events from their perspectives think local and general governments should find solutions to ecological situations. Although they care about the ecological situation, they believe they can do nothing about it and that this is a power in the hands of community representatives. People interested in the land, who enjoy being in the environment and having specific experiences, and who care about ecological protection can engage in volunteer activities in this direction.

Another sub-dimension of the relationship with nature (experience), an independent variable that significantly affects action orientation, perspective, and self-identity, does not have a statistically significant effect on this dimension. Individuals interested in the earth, have a specific experience in nature, or desire to have an experience will also be in an action-oriented state. The reason for the insignificant relationship in the perspective dimension can be shown that individuals who look at things from a personal perspective are less likely to act action- oriented. It is difficult for an objective way of thinking to turn into action, especially regarding social responsibility and protecting endangered nature. Therefore, a subjective perspective is not expected to lead to action. On the other hand, self-identity is subjective as it is self-formed entirely

according to one's characteristics. As stated above, it is difficult for an individual to take action with his/herself.

While perspective and self-identity significantly affect the last sub-dimension of the dependent variable, altruistic behavior, experience does not have a statistically significant effect. Based on this finding, it is seen that people who evaluate events from a particular perspective are less likely to care about other individuals or entities outside themselves or their field. They care about the welfare of their society before other beings living in the world. People with a self-identity may also focus on their field due to their more subjective view of events. However, people with experience have a more global perspective in this regard.

Based on the findings obtained, there is a significant relationship between the variables in the model in general. However, there are no statistically significant relationships in the subdimensions of some variables. From this point of view, the study's starting point, the hypothesis "There is a statistically significant effect of relationship with nature on global social responsibility behavior within the scope of Last Chance Tourism" was supported.

- In the design phase of the study, the question "Do tourists' relations with nature within the scope of last chance tourism affect global social responsibility awareness?" was seen as the research problem.
- The findings obtained show that "within the scope of last-chance tourism, tourists' relations with nature have an effect on global social responsibility awareness," but this effect is not supported by all sub-dimensions of the variables.

Based on the results of the study, some suggestions are presented to the sector, the public, and future studies:

- It is recommended that planning should be done before organizing last-chance tourism to regions facing extinction in the sector. As a result of this planning, a movement can be created to ensure the continued existence of that region, not just to see it as a last chance.
- Overtourism, which will be created due to tours organized to see it for the last time, will accelerate the destruction of the destination. Therefore, it is recommended that technology be utilized. In this context, augmented, virtual, and extended reality technologies can be used.
- It is recommended that the public sector take necessary security measures for destinations to be visited within the scope of last-chance tourism, limit the capacity of visitors, and monitor them.
- In future studies, it is vital to raise awareness of the sector and the public by conducting studies with different variables on the effects of these visits on the destination within the scope of last-chance tourism. In addition, it is crucial for the protection of the region that the technological devices proposed to be used in the sector are pre-tested by universities with projects.

REFERENCES

- Ahmad, N. A., Azman, I. M., Darson, M. D., & Shamsudin, N. S. (2014). Perceived importance: Last chance tourism in Malaysia. (Eds.) Sumarjan, N., Salehuddin, M., Zahari,
- M. et al. In *Hospitality and Tourism: Synergizing Creativity and Innovation in Research* (pp. 343-348), London: CRC Press.
- American Society for Quality, (2021). What is social responsibility? Retrieved from https://asq.org/quality-resources/social-responsibility#Business, (10.03.2022).
- Ballantyne, R., Packer, J., & Axelsen, M. (2009). Trends in tourism research. *Annals of Tourism Research*, 36(1), pp. 149–152.
- Capaldi, C. A., Dopko, R. L. & Zelenski, J. M. (2014). The relationship between nature connectedness and happiness: A meta-analysis. *Frontiers in Psychology*, 5, pp. 1-15.

- Cohen, B. (2017). *Last-chance tourism: People are flocking to these destinations before they disappear*. Retrieved from https://www.10best.com/interests/explore/last-chance-tourism-people-flocking-to-destinations-before-they-disappear/, (07.03.2022).
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Das, M., & Chatterjee, B. (2015). Ecotourism: A panacea or a predicament? *Tourism Management Perspectives*, 14, pp. 3–16.
- Dawson, M. J. Johnston, E. J. Stewart, C. J., Lemieux, C. J., Lemelin, R. H., Maher, P. T., & Grimwood, B. S. R. (2011) Ethical considerations of last chance tourism, *Journal of Ecotourism*, 10(3), pp. 250-265.
- Dawson, J., Lemelin, R. H., Steward, E. & Tailon, J. (2015). Last chance tourism: A race to be last? (Eds.) Hughes, M., Weaver, D., & Pforr, C. In *The Practice of Sustainable Tourism: Resolving the Paradox* (pp. 133-145). USA: Routledge.
- Demirtaş, N. (2011). Turizm ve çevre. Ankara: Ankara Üniversitesi Uzaktan Eğitim Yayınları.
- Denley, T. J., Woosnam, K. M., Ribeiro, M. A., Boley, B. B., Hehir, C., & Abrams, J. (2020). Individuals' Intentions to engage in last chance tourism: Applying the value-belief-norm model. *Journal of Sustainable Tourism*, 28(11), pp. 1860-1881.
- Eijgelaar, E., Thaper, C., & Peeters, P. (2010). Antarctic cruise tourism: The paradoxes of ambassadorship, "Last Chance Tourism" and Greenhouse Gas Emissions. *Journal of Sustainable Tourism*, 18(3), pp. 337–354.
- Ewest, T. (2015). The relationship between transformational leadership practices and global social responsibility. *Journal of Leadership Studies*, 9, 19-29.
- Frumkin H., Bratman, G. N., Breslow, S. J., Cochran, B., Kahn Jr, P. H., Lawler, J. J., Levin, P. S., Tandon, P. S., Varanasi, U., Wolf, K. L., & Wood, S. A. (2017). Nature contact and human health: A research agenda. *Environmental Health Perspectives*, 125(7), 075001-1 075001-18.
- Groulx, M., Boluk, K., Lemieux, C. J. & Dawson, J. (2019). Place stewardship among last chance tourists. *Annals of Tourism Research*, 75, pp. 202-212.
- Groulx, M., Lemieux, C., Dawson, J., Stewart, E., & Yudina, O. (2016). Motivations to engage in last chance tourism in the Churchill Wildlife Management Area and Wapusk National Park: The role of place identity and nature relatedness. *Journal of Sustainable Tourism*, 24(11), pp. 1523-1540.
- Hair, J.F., Tomas, G., Hult, M., Ringle, C.M. ve Sarstedt, M. (2014). *A primer on partial least square structural equations modeling (PLS-SEM.* Los Angeles: Sage.
- Hindley, A., & Font, X. (2018). Values and motivations in tourist perceptions of last-chance tourism. *Tourism and Hospitality Research*, 18(1), pp. 3-14.
- Hoogendoorn, G. (2021). Last chance tourism in South Africa: Future research potential? *Tourism: An International Interdisciplinary Journal*, 69(1), pp. 73–82.
- Jones, E., Leask, B., Brandenburg, U. & de Wit, H. (2021). Global social responsibility and the internationalisation of higher education for society. *Journal of Studies in International Education*, 25(4), pp. 330-347.
- Kılıç, B., & Yozukmaz, N. (2020). A conceptual review of last chance tourism: The case of Turkey. *Tourism: An International Interdisciplinary Journal*, 68(3), pp. 322–335.
- Lemelin, H., Dawson, J., Stewart, E. J., Maher, P., & Lueck, M. (2010). Last-chance tourism: The boom, doom, and gloom of visiting vanishing destinations. *Current Issues in Tourism*, 13, 477-493.
- Löbler, H. (2017). Humans' relationship to nature Framing sustainable marketing. *Journal of Services Marketing*, 31(1), pp. 73-82.
- Luo, W. B., Zhang, X. H., Zhong, C., Meng, B., & Timothy, D. J. (2017). Research on the influencing factors of tourists' environmentally responsible behavior in urban natural scenic spots. *China Population, Resources and Environment*, 27(5), pp. 161-169.
- Metz, A. L. (2017). Back to Nature: The relationship between nature relatedness on empathy and narcissism in the millennial generation. *Vistas Online*, 11, pp. 1-14.

- Miller, L. B., Hallo, J. C., Dvorak, R. G., Fefer, J. P., Peterson, B. P., & Brownlee, M. T. J. (2020). On the edge of the World: Examining pro-environmental outcomes of last chance tourism in Kaktovik, Alaska. *Journal of Sustainable Tourism*, pp. 1–20.
- Nakamura, M., & Watanabe-Maruoka, A. (2006). Global social responsibility: Developing scale for senior high school students in Japan. *International Journal for Advancement of Counselling*, 28(3), pp. 213-226.
- Paiva, D., Carvalho, L., Brito-Henriques, E., Sousa, A. M., Soares, A. L., & Azambuja S. T. (2023). Digital storytelling and hopeful last chance tourism experiences, *Tourism Geographies*, 25(5), pp. 1428-1444.
- Paskova, M., & Zelenka, J. (2019). How crucial is the social responsibility for tourism sustainability? *Social Responsibility Journal*, 15(4), pp. 534-552.
- Pejic Bach, M., Zoroja, J., & Merkac-Skok, M. (2014). Social responsibility in tourism: system archetypes approach. *Kybernetes*, 43(3/4), pp. 587–600.
- Piggott-McKellar, A. E. & McNamara, K. E. (2016). Last chance tourism on the Great Barrier Reef. *Journal of Sustainable Tourism*, 25, pp. 1-19.
- Pritchard, A., Richardson, M., Sheffield, D. & McEwan, K. (2019). The relationship between nature connectedness and eudaimonic well-being: A meta-analysis. *Journal of Happiness Studies*, 21, pp. 1145-1167.
- Reiser, D. (2017). Will the Ark sink? Captive wildlife, tourism and the human relationship to nature: demystifying zoos. (Eds.) Borges de Lima, I., Green, R. J. In *Wildlife Tourism, Environmental Learning and Ethical Encounters: Ecological and Conservation Aspects* (pp. 263-272). Cham: Springer.
- Salim, E., & Ravanel, L. (2020). Last chance to see the ice: Visitor motivation at Montenvers-Mer-de-Glace, French Alps. *Tourism Geographies*, pp. 1-23.
- Starrett, R. H. (1996). Assessment of global social responsibility. Psychological Reports, 78(2), 535-554.
- Thomas, E. (2020). *Last chance tourism destroys the very places people want to save*. Retrieved from https://lithub.com/last-chance-tourism-destroys-the-very-places-people-want-to-save/, (15.03.2022).
- Wetzels, M., Odekerken-Schroder, G., & van Oppen, C. (2009), Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration, *MIS Quarterly*, 3(1), pp. 177-196.
- White, R. (2004). Young children's relationship with nature: Its importance to children's development & the Earth's future. Retrieved from https://www.sparkmontessori.org/wp-content/uploads/2019/01/YoungChildrensRelationshipwithNature.pdf, (15.03.2022).
- Yılmaz, V., Kinaş, Y. & Olgaç, S. (2024). SMART PLS 4 ile yapısal eşitlik modellemesi, Ankara: Detay Yayıncılık.
- 10 Places in the World you must see before they disappear (Video) https://www.youtube.com/watch?v=gYpjAGCvsu0&list=PLHx-wvUB9_JG_LmfFUoiapWY1nuuLoHpy&index=3



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