Tourism destination social responsibility and the moderating role of self-congruity

Osman M. Karatepe, Hamed Rezapouraghdam, Raheleh Hassannia, Taegoo Terry Kim and Constanța Enea

Abstract
Purpose – This paper investigates the interrelationships of destination social responsibility (DSR), emotional attachment, self-congruity, experiential satisfaction and environmentally responsible behavior (ERB).
Design/methodology/approach – Using a sample of 294 visitors to the Guangzhou Zoo in China, this study tested the aforementioned relationships via structural equation modeling.
Findings – Emotional attachment mediates the effect of DSR on experiential satisfaction, while emotional attachment and experiential satisfaction mediate the effect of DSR on ERB sequentially. Moreover, self-congruity moderates the relationship between DSR and emotional attachment.
Practical implications – The management of zoos should use DSR communication strategies more proactively to make visitors become well-aware of their economic, philanthropic, environmental and social activities in the host community. This will result in many positive consequences, including visitors’ ERBs.
Originality/value – The study adds to the DSR literature by introducing multiple mediation mechanisms and paths that lead to visitors’ ERBs.
Keywords Destination social responsibility, Environmentally responsible behavior, Experiential satisfaction, Self-congruity, Zoo
Paper type Research paper

旅游目的地社会责任与自我契合度的调节作用

目的：旅游目的地社会责任（DSR）、情感依恋、自我一致性、体验满意度和对环境负责的行为（ERB）之间的相互关系。
设计方法/方法：我们的研究以中国广州动物园的294名游客为样本，通过结构方程模型测试了上述关系。
发现：情感依恋介导了DSR对体验满意度的影响，而情感依恋和体验满意度依次介导了DSR对ERB的影响。
此外，自我一致性调节了DSR与情感依恋之间的关系。
实际意义：动物园的管理层应更积极地使用DSR沟通策略，让游客充分了解他们在东道社区的经济、慈善、环境和社会活动，这将带来许多积极的后果，包括游客的ERB。
独创性/价值：该研究通过引入多种调解机制和导致访客ERB的路径增加了DSR文献。
关键词：目的地社会责任, 对环境负责的行为, 体验满意度, 自我一致性, 动物园
文章类型 研究型论文

La responsabilidad social de los destinos turísticos y el papel moderador de la autocongruencia

Resumen
Propósito: nuestro artículo investiga las interrelaciones de la responsabilidad social del destino (DSR), el apego emocional, la autocongruencia, la satisfacción experiencial y el comportamiento ambientalmente responsable (ERB).
Diseño/metodología/enfoque: utilizando una muestra de 294 visitantes del zoológico de Guangzhou en China, nuestro estudio probó las relaciones antes mencionadas a través del modelo de ecuaciones estructurales.
Hallazgos: el apego emocional medía el efecto de DSR en la satisfacción experiencial, mientras que el apego emocional y la satisfacción experiencial medían el efecto de DSR en ERB secuencialmente. Además, la autocongruencia modera la relación entre DSR y apego emocional.

Osman M. Karatepe is based at the Faculty of Tourism, Eastern Mediterranean University, Famagusta, Turkey and The Department of Global Business, School of Global Eminence, Kyung Hee University, Seoul, Republic of Korea.
Hamed Rezapouraghdam and Raheleh Hassannia are both based at the Faculty of Tourism, Eastern Mediterranean University, Famagusta, Turkey.
Taegoo Terry Kim is based at the Department of Global Business, School of Global Eminence, Kyung Hee University, Seoul, Republic of Korea. Constanța Enea is based at the Economics Faculty, Constantin Brâncuși University of Târgu Jiu, Targu Jiu, Romania.

Received 13 January 2023
Revised 11 April 2023
31 May 2023
24 July 2023
Accepted 24 July 2023
Implicaciones prácticas: la administración de los zoológicos debe utilizar estrategias de comunicación de DSR de manera más proactiva para que los visitantes estén bien informados sobre sus actividades económicas, filantrópicas, ambientales y sociales en la comunidad anfitriona. Esto tendrá muchas consecuencias positivas, incluidos los ERB de los visitantes.

Originalidad/valor: el estudio se suma a la literatura de DSR al presentar múltiples mecanismos de mediación y caminos que conducen a los ERB de los visitantes.

Palabras clave Responsabilidad social del destino, Comportamiento ambientalmente responsable, Satisfacción experiencial, Autocongruencia, Zoológico

Tipo de papel Trabajo de investigación

1. Introduction

The management of tourism destinations has begun to admit the value of social responsibility to ensure stakeholder satisfaction and attain sustainable development (Agapito et al., 2023; Tran et al., 2023). Tourism should protect the nature, have a mindful consumption of resources, decrease waste and support environmentally responsible behavior (ERB) for the achievement of sustainable competitiveness. Both the social responsibility of destinations and stakeholders’ adaptation of responsible behaviors are essential to the accomplishment of sustainable development of host communities and the environmental protection of destinations (Su et al., 2018a).

To minimize the adverse effects and increase the positive impacts of tourism operations on the well-being of humans and nonhumans, scholars have advocated the significance of destination social responsibility (DSR) (Agapito et al., 2023; He et al., 2022; Lee et al., 2021). DSR refers to the “[...] perceptions of obligations and activities that are applied to all
stakeholders, including tourists, community residents, employees, investors, governments, suppliers, and competitors” (Su et al., 2017, p. 490). Acknowledging DSR is so crucial for destination managers because the demand for and sensitivity to environmentally friendly consumer goods has dramatically increased. Realizing that consumers bring self-image to the evaluation process and tend to purchase goods and services with image characteristics congruent with their own (Koo et al., 2014), the commitment of destinations and corporations to socio-environmentally responsible operations is considered essential (Agapito et al., 2023; Bogan et al., 2021).

Using zoo visitors as an example, the importance of responsibility-related expectations from the public has drastically increased because zoos are under pressure to demonstrate their function and value of maintaining animals in captivity. Managing visitor experience and fulfilling their satisfaction in zoos are highly important for them to remain competitive as recreational and travel destinations (Agyeman and Asebah, 2022). At the same time, ascertaining the elements that may influence visitors’ participation in ERB is crucial for achieving a sustainable tourism operation.

1.1 Purpose

Our paper examines the interrelationships of DSR, emotional attachment, self-congruity, experiential satisfaction and ERB. Specifically, the objectives of our empirical paper are to gauge:

- emotional attachment as a mediator of the influence of DSR on experiential satisfaction and ERB;
- emotional attachment and experiential satisfaction as the multiple mediators of the effect of DSR on ERB in a sequential manner; and
- self-congruity as a moderator of the impact of DSR on emotional attachment.

1.2 Contribution

This empirical research enhances the tourism knowledge base in the following ways. First, despite the magnitude of available research on corporate social responsibility in other sectors, the study of DSR in tourism is an emerging research topic that has received less attention (Agapito et al., 2023). Attention to the social responsibility of zoos and the consequences of that phenomenon on visitors is very important because zoos play a crucial role in the ecological awareness of the community and formal/informal environmental education (Ballantyne et al., 2021). Our study gauges the effect of DSR on visitors’ ERBs in the context of a zoo.

Second, ERBs are highly essential for the sustainable development of tourism destinations, and the active participation of visitors in ERB is helpful as visitors are one of the main stakeholders (Lee et al., 2021). Experiential satisfaction explores individuals’ overall assessment of experiences after consumption (Wu et al., 2018), which are influenced by emotional attachment (Prayag et al., 2018). Linking DSR to ERB, our paper tests emotional attachment and experiential satisfaction in a sequential manner.

Third, the impacts of tourists’ emotional states on their ERBs have received little attention (Gezhi and Xiang, 2022). Drawing from attachment theory, emotional attachment is characterized by deep feelings of connection, affection and passion between a person and a brand. We propose that emotional attachment can act as an underlying mechanism linking DSR to both experiential satisfaction and ERB.

Fourth, zoos provide opportunities for visitors to interact directly with wildlife. Thus, observing tourist satisfaction in such artificial settings is important (Agyeman and Asebah, 2022). Experiential satisfaction, which is associated with individuals’ overall assessment of
experiences after consumption (Wu et al., 2018), has been subjected to limited empirical examination in a zoo context.

Lastly, in the context of zoos and aquariums, the lower uptake of environmental behaviors by tourists following visits to such destinations could be due to a mismatch between visitors’ values with messages they have received from these places (Ballantyne et al., 2021). Self-congruity, which refers to an assessment of the match or mismatch between one’s self-image with a product and perceived brand image (Fu et al., 2020; Tran et al., 2022), has not been considered as a moderator between DSR and zoo visitors’ emotional attachment so far.

2. Research model

We used solid theoretical underpinnings to develop our research model (Figure 1). These include attachment (Bowlby, 1969), self-congruity (Sirgy, 1986), signaling (Spence, 2002), social exchange (Blau, 1968), self-determination (Ryan and Deci, 2000), reformulation of attitude (Bagozzi, 1992) and stimulus–organism–response (S–O–R) (Mehrabian and Russell, 1974) theories. DSR nurtures emotional attachment and emotional satisfaction and enhances ERB among visitors. However, the positive influence of DSR on emotional attachment is stronger for visitors with a higher sense of self-congruity. Emotional attachment mediates the link between DSR, experiential satisfaction and ERB, while emotional attachment and experiential satisfaction sequentially mediate the link between DSR and ERB.

2.1 Hypotheses

Consistent with attachment theory (Bowlby, 1969), which indicates that individuals develop bonds or links with particular objects, locations or brands (Thomson et al., 2005), visitors

Figure 1 Research model

<table>
<thead>
<tr>
<th>Simple mediating effect of EA</th>
<th>Serial multiple mediating effects of EA and ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>H8: DSR → EA → ES</td>
<td>H10: DSR → EA → ES → ERB</td>
</tr>
<tr>
<td>H9: DSR → EA → ERB</td>
<td></td>
</tr>
</tbody>
</table>

Note: Emotional attachment is a second-order reflective factor composed of the three first-order factors: affectionate, connection and passion

Source: Authors’ own creation
form a relationship with destinations. Visitors can emotionally attach to places characterized by DSR, which is a series of beneficial activities and obligations toward stakeholders (Su et al., 2017). When tourists perceived a destination as socially responsible, they developed positive emotions toward the destination. Hence, we hypothesize that:

H1. DSR positively relates to emotional attachment.

According to self-congruity theory, consumers’ self-concepts and product images influence their attitudes and behaviors toward products or brands (Sirgy, 2018). The theory proposes that consumers prefer brands or products that match their self-concept, which is the perceived image of themselves (Sirgy, 1986). Because customers bring their self-images into the evaluation of a brand, the probability of choosing the one with image characteristics similar to their own is higher (cf. Koo et al., 2014). The literature supports the fact that consistency between these two can lead to positive attitudes and behaviors (Fu et al., 2020).

Although DSR can provoke visitors’ emotional attachment, the link can be expected to be stronger among individuals with higher self-congruity because self-image is a key factor influencing customers’ emotional connection with a place (Sirgy, 1986). In light of the above discussion, it is hypothesized that:

H2. The positive impact of DSR on emotional attachment is moderated by self-congruity such that it is stronger among visitors high on self-congruity.

Signaling theory explains how the deliberate positive information sharing of an entity’s insiders with outsiders disseminates positive attributes about the entity (Connelly et al., 2011) such as experiential satisfaction. According to signaling theory, DSR can lead to customer satisfaction by signaling the destination’s commitment to ethical and sustainable practices and enhancing the overall quality of the customer experience. Empirically, Su et al. (2018b) reported that a destination’s positive reputation was linked to greater satisfaction with a destination. Hence, we hypothesize that:

H3. DSR positively relates to experiential satisfaction.

Social exchange theory (SET) presents an appropriate framework for reciprocity that has been frequently used to investigate effective interactions between two parties (Cropanzano and Mitchell, 2005). Drawing on the SET, DSR practices can motivate stakeholders to foster positive perceptions. This stems from the essence of DSR which encompasses taking care of various stakeholders (Su et al., 2018a). In return, individuals display favorable intentions and behaviors such as ERB (Su et al., 2018b, 2018c). Hence, we hypothesize that:

H4. DSR positively relates to ERB.

Attachment to a place gives rise to satisfaction, and the emotion between a place and a person can elicit positive customer satisfaction (Ramkissoon et al., 2013). This relationship can be explained by the tenet of the self-determination theory (SDT) (Ryan and Deci, 2000). Specifically, individuals have three basic psychological needs: autonomy, competence and relatedness (Ryan and Deci, 2000). Attachment to a place can fulfill these needs by providing a sense of identity, familiarity and belonging, which in turn may result in higher levels of satisfaction with the place. In a study among travelers visiting a dark tourism site in Ghana, Prayag et al. (2018) demonstrated that attachment to the place predicted visitor satisfaction. Hence, we hypothesize that:

H5. Emotional attachment positively influences experiential satisfaction.

In line with attachment theory (Bowlby, 1969), individuals’ emotional bond with a destination can motivate them to develop protective tendencies toward the place (Daryanto and Song, 2021). For example, Ramkissoon et al.’s (2013) research denoted that attachment to a place positively affected tourists’ proclivity to behave in a proenvironmentally friendly way. Zoos represent highly social settings that provoke individuals’ emotional and empathic
responses that can contribute to their environmental concerns and behavioral propensity. Accordingly, we hypothesize that:

H6. Emotional attachment positively influences ERB.

According to the reciprocity thesis in SET (Blau, 1968), visitors who get a beneficial resource from destinations are likely to demonstrate a variety of supporting behaviors such as ERB in exchange. That is, the higher tourists’ experiential satisfaction, the more they will be prone to act favorably toward the destination (Wu and Li, 2017). Previous literature denoted that satisfaction with a place positively influenced visitors’ low-effort proenvironmental behavior (PEB) (Ramkissoon et al., 2013). Hence, we hypothesize that:

H7. Experiential satisfaction positively influences ERB.

According to the reformulation of attitude theory (Bagozzi, 1992), attitudes are generated through a cognitive appraisal process in which individuals analyze the attributes and characteristics of the object and develop evaluations about it, which are then combined with emotional reactions. Moreover, dimensions of place attachment were found to be working as a mediator between destination reputation and tourist satisfaction (Su et al., 2018b). Hence, we hypothesize that:

H8. Emotional attachment mediates the effect of DSR on experiential satisfaction.

S-O-R theory argues that people’s internal state is affected by a stimulus from the surrounding environment that in turn leads to their response reaction (Mehrabian and Russell, 1974). An individual’s reaction and the stimulus are connected through the mediating role of individuals’ emotions (Kuo et al., 2018). Tourists’ place attachment (destination identification) was found to act as a mediator between DSR and visitors’ ERBs (Su and Swanson, 2017). Hence, it is hypothesized that:

H9. Emotional attachment mediates the effect of DSR on ERB.

The sequential mediating process regarding the DSR → emotional attachment → experiential satisfaction → ERBs linkage can be developed based on the tenets of reformulation of attitude (Bagozzi, 1992) and SET theories (Blau, 1968). According to the former, when tourists make a positive evaluation of the destination, they become emotionally attached to and are satisfied with the destination. According to SET (Blau, 1968), tourists’ experiential satisfaction with the destination denotes favorable behaviors such as ERB in exchange. Past literature supports the aforementioned sequential links. For example, Su et al. (2018b) reported that place attachment mediated the association between destination reputation and tourist satisfaction. Ramkissoon et al. (2013) found that place satisfaction mediated the association between place attachment and visitors’ PEBs. Hence, it is hypothesized that:

H10. Emotional attachment and experiential satisfaction mediate the effect of DSR on ERB sequentially.

3. Method

3.1 Participants and procedure

The Guangzhou Zoo is one of China’s major metropolitan zoos. Besides its entertaining operation, the zoo is involved in various animal protection and nature conservation activities such as organizing captive wild animal welfare seminars and symposiums to spread knowledge about birds and the environment. We used the convenience sampling technique to collect data from visitors who experienced the Guangzhou Zoo in China. Visitors were approached as they exited the zoo and were requested to complete 10-min questionnaires after receiving their consent. Of the 400 self-administered questionnaires, 324 responses were received.
We screened the data before the analysis. Eleven cases with a $Z$-score of ±3 or higher were deleted. Finally, 19 cases were discarded based on the Mahalanobis distance value as the multivariate outlier control. Mardia’s (1985) multivariate kurtosis $Z$-score (4.249) was less than 5, which supported the multivariate normal distribution. Consequently, 294 questionnaires (Table 1) were used in the analysis. The response rate was 73.5% (294/400).

### 3.2 Instrumentation

The survey instrument was before prepared in English and then back-translated into Chinese. The results of a pilot study conducted with ten visitors led to no changes. DSR was operationalized with 5 items from Su et al. (2018c). The emotional attachment was operationalized via ten items from Thomson et al. (2005). Four items came from Wu et al. (2018) to assess experiential satisfaction. Six items from Su and Swanson (2017) were used to assess ERBs. Four items borrowed from Sirgy et al. (1997) were used to gauge self-congruity. Responses to the abovementioned items were coded as “7 = strongly agree” to “1 = strongly disagree.” The Appendix gives the scale items and their sources.

### 3.3 Data analyses

We applied the two-stage structural equation modeling (SEM) procedure (AMOS 18.0). First, the measurement model was analyzed via confirmatory factor analysis (CFA). Second, the hypotheses were gauged via SEM. Model fit indices – absolute fit indices: $\chi^2$, normed $\chi^2$, goodness of fit index (GFI), standardized root mean residual (SRMR) and root mean square error of approximation (RMSEA),” and incremental fit indices: “incremental fit index (IFI), Tucker–Lewis’s index (TLI) and comparative fit index (CFI)” – were used to estimate the models. The values of normed $\chi^2 < 3.000$; SRMR < 0.05; RMSEA < 0.080; and GFI, IFI, TLI and CFI > 0.900 are usually associated with a good model fit (Hair et al., 2010).

We applied Ping’s (1996) two-step single-indicant estimation method for modeling latent variable interactions. To estimate the mediating effects, the bias-corrected (BC) bootstrapping (resamples: 10,000) method was performed. Moreover, we deployed the phantom variable to gauge the indirect influences of mediators.

### Table 1  Respondents’ profile ($n = 294$)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>203</td>
<td>69.0</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>31.0</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–27</td>
<td>94</td>
<td>32.0</td>
</tr>
<tr>
<td>28–37</td>
<td>107</td>
<td>36.4</td>
</tr>
<tr>
<td>38–47</td>
<td>55</td>
<td>18.7</td>
</tr>
<tr>
<td>48–57</td>
<td>30</td>
<td>10.2</td>
</tr>
<tr>
<td>58–67</td>
<td>8</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>57</td>
<td>19.4</td>
</tr>
<tr>
<td>Secondary or high school</td>
<td>104</td>
<td>35.4</td>
</tr>
<tr>
<td>Two-year college degree</td>
<td>40</td>
<td>13.6</td>
</tr>
<tr>
<td>Four-year college degree</td>
<td>78</td>
<td>26.5</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>15</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single or divorced</td>
<td>139</td>
<td>47.3</td>
</tr>
<tr>
<td>Married</td>
<td>155</td>
<td>52.7</td>
</tr>
</tbody>
</table>

**Source:** Authors’ own creation
The minimum sample size for SEM was 170 ("anticipated effect size" = 0.3 medium effect size; "desired statistical power level" = 0.8; "number of latent variables" = 7 [DSR, emotional attachment: affectionate, connection and passion; experiential satisfaction, ERB and self-congruity]; "number of observed variables" = 33 [5 items for DSR, 4 items for emotional attachment: affectionate, 3 items for emotional attachment: connection, 3 items for emotional attachment: connection, 4 items for experiential satisfaction, 6 items for ERB, 4 items for self-congruity and 4 control variables]; and "probability level" = 0.05). In short, the sample size was sufficient to detect the effect via SEM (Soper, 2023).

4. Results

4.1 Measurement model

For model parsimony, as presented in Table 2, we formed three parcels that represented the three dimensions (i.e. affectionate, connection and passion) of emotional attachment by forming domain-representative parcels to serve as indicators in the measurement model. The results from CFA verified convergent validity. Specifically, the measurement model denoted a good model fit of \( \chi^2_{[df]} = 370.825, \text{Normed } \chi^2 = 1.863, \text{GFI} = 0.901, \text{SRMR} = 0.050, \text{RMSEA} = 0.054; \text{IFI} = 0.934; \text{TLI} = 0.923 \) and \( \text{CFI} = 0.933. \) All items loaded onto their respective latent

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Measurement model test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>AVE</td>
</tr>
<tr>
<td>Destination social responsibility (DSR)</td>
<td>0.517</td>
</tr>
<tr>
<td>DSR1</td>
<td></td>
</tr>
<tr>
<td>DSR2</td>
<td></td>
</tr>
<tr>
<td>DSR3</td>
<td></td>
</tr>
<tr>
<td>DSR4</td>
<td></td>
</tr>
<tr>
<td>DSR5</td>
<td></td>
</tr>
<tr>
<td>Emotional attachment (EA)</td>
<td>0.536</td>
</tr>
<tr>
<td>EA1 (parcel1). Affectionate</td>
<td></td>
</tr>
<tr>
<td>EA2 (parcel2). Connection</td>
<td></td>
</tr>
<tr>
<td>EA3 (parcel3). Passion</td>
<td></td>
</tr>
<tr>
<td>Experiential satisfaction (ES)</td>
<td>0.510</td>
</tr>
<tr>
<td>ES1</td>
<td></td>
</tr>
<tr>
<td>ES2</td>
<td></td>
</tr>
<tr>
<td>ES3</td>
<td></td>
</tr>
<tr>
<td>ES4</td>
<td></td>
</tr>
<tr>
<td>Environmentally responsible behavior (ERB)</td>
<td>0.544</td>
</tr>
<tr>
<td>ERB1</td>
<td></td>
</tr>
<tr>
<td>ERB2</td>
<td></td>
</tr>
<tr>
<td>ERB3</td>
<td></td>
</tr>
<tr>
<td>ERB4</td>
<td></td>
</tr>
<tr>
<td>ERB5</td>
<td></td>
</tr>
<tr>
<td>ERB6</td>
<td></td>
</tr>
<tr>
<td>Self-congruity (SC)</td>
<td>0.570</td>
</tr>
<tr>
<td>SC1</td>
<td></td>
</tr>
<tr>
<td>SC2</td>
<td></td>
</tr>
<tr>
<td>SC3</td>
<td></td>
</tr>
<tr>
<td>SC4</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Average variance extracted \( \left( \frac{\sum \lambda^2}{\sum \lambda^2 + \sum \alpha^2} \right) \) and composite reliability values \( \left( \frac{\sum \lambda^2}{\sum \lambda^2 + \sum \alpha^2} \right) \) were calculated through the formulas proposed by Fornell and Larcker (1981), where, \( \lambda \) is the standardized loading, and \( \alpha \) is the error variance. AVE = average variance extracted; CR = composite reliability; SLs = standardized loadings; – denotes fixed

Source: Authors’ own creation
constructs, and all standardized loadings (SLs) (ES1 0.614 to EA3, ES4 0.827) were significant ($p < 0.01$) and exceeded the minimum value of 0.50 (Hair et al., 2010). All average variance extracted values were larger than the threshold level of 0.50 (Fornell and Larcker, 1981).

Each composite reliability was above 0.60. All coefficient alphas were also well above the threshold level of 0.70. Based on these results, there was evidence of internal consistency reliability.

The correlations between pairs of latent constructs were smaller than the square root of the average variance extracted score (Table 3). Hence, discriminant validity was confirmed.

4.2 Common method variance

In addition to the procedural remedies such as “Any sort of information collected during our research will be kept confidential,” we controlled common method variance using statistical remedies. Specifically, the result of the $\chi^2$ difference test between measurement models with and without the unmeasured latent method factor (ULMF) revealed that the difference was significant ($\Delta \chi^2_{[df]} = 105.114[22]$, $p < 0.01$). Yet the absolute differences (0.000–0.094) in SLs were small. The SLs remained significant in both cases. This was also true for the paths between the two structural models with and without the ULMF. These findings collectively indicated that common method variance was not a problem (Bagozzi and Yi, 1990).

4.3 Structural model

The findings denoted that the model fit the empirical data well with $\chi^2 = 268.437[208]$, normed $\chi^2 = 1.291$, GFI = 0.928, SRMR = 0.049, RMSEA = 0.031; IFI = 0.973; TLI = 0.967 and CFI = 0.972.” Of the ten hypotheses, nine hypotheses ($H1$, $H2$, $H3$, $H4$, $H5$, $H6$, $H7$, $H8$ and $H10$) were supported, but $H9$ was not supported (Figure 2).

4.3.1 Direct impacts. The results supported $H1$, $H3$ and $H4$ because DSR positively influenced emotional attachment ($\beta_{EA, DSR} = 0.263$, $t = 3.776$), experiential satisfaction ($\beta_{ES, DSR} = 0.335$, $t = 4.749$) and ERB ($\beta_{ERB, DSR} = 0.192$, $t = 2.646$) (one-tailed test: $t > 1.65$, $p < 0.05$, and $t > 2.33$, $p < 0.01$). The path coefficients from emotional attachment to experiential satisfaction ($\beta_{ES, EA} = 0.190$, $t = 2.620$, $p < 0.01$) and ERB ($\beta_{ERB, EA} = 0.123$, $t = 1.710$, $p < 0.05$) were positive, thus supporting $H5$ and $H6$, respectively. $H7$ was verified

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Summary statistics, correlations of constructs and discriminant validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>GEN</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>GEN</td>
<td>1.000</td>
</tr>
<tr>
<td>AGE</td>
<td>(-0.034)</td>
</tr>
<tr>
<td>EDU</td>
<td>(0.061)</td>
</tr>
<tr>
<td>MAR</td>
<td>(0.059)</td>
</tr>
<tr>
<td>DSR</td>
<td>(-0.077)</td>
</tr>
<tr>
<td>EA</td>
<td>(0.136*)</td>
</tr>
<tr>
<td>ES</td>
<td>(0.053)</td>
</tr>
<tr>
<td>ERB</td>
<td>(0.003)</td>
</tr>
<tr>
<td>SC</td>
<td>(0.121*)</td>
</tr>
<tr>
<td>$\sqrt{AVE}$</td>
<td>(0.719)</td>
</tr>
<tr>
<td>$M$</td>
<td>(0.310)</td>
</tr>
<tr>
<td>$SD$</td>
<td>(0.463)</td>
</tr>
</tbody>
</table>

**Notes:** GEN = gender; EDU = education; MAR = marital status; DSR = destination social responsibility; EA = emotional attachment; ES = experiential satisfaction; ERB = environmentally responsible behavior; SC = self-congruity; AVE = average variance extracted; M = mean; SD = standard deviation. "are the correlations between observed constructs (below the diagonal) and \(\ast\)are the correlations between latent variables (within the parentheses [ ]). \("p < 0.05\), \("p < 0.01\) (one-tailed test)

**Source:** Authors' own creation

TOURISM REVIEW
because the effect of experiential satisfaction on ERB was 0.149 ($\beta_{ERB, ES}$) and positive ($t = 2.065, p < 0.05$).

4.3.2 Moderating impact. The interactive impact of DSR and self-congruity on emotional attachment was 0.136 ($\gamma_{EA, DSR \times SC}$), which was significant ($t = 1.691, p < 0.05$). This verified $H2$. This finding implies that as self-congruity increases by one unit, the impact of DSR on emotional attachment increases by 0.136 (i.e. strengthening effect). The more DSR is perceived, the more emotional attachment increases, and the stronger the self-congruity, the more emotional attachment increases.

4.3.3 Simple mediating impacts. As presented in Table 4, the BC bootstrapped 95% CI for the indirect influence of DSR on experiential satisfaction via emotional attachment ($b = 0.049; 95\% CI = [0.013, 0.110]$) was significant because the CIs did not consist of zero. Thus, $H8$ was supported. Because the direct association between DSR and emotional attachment ($H9$) was significant, emotional attachment played a partial mediating role between DSR and experiential satisfaction. However, the indirect impact of DSR on ERB through emotional attachment ($b = 0.031; 95\% CI = [-0.004, 0.086]$) was not significant because the CIs contained zero. Therefore, $H9$ was not supported.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Indirect effect</th>
<th>$b$</th>
<th>SE</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H8$</td>
<td>DSR $\rightarrow$ EA $\rightarrow$ ES</td>
<td>0.049</td>
<td>0.024</td>
<td>0.013</td>
<td>0.110</td>
</tr>
<tr>
<td>$H9$</td>
<td>DSR $\rightarrow$ EA ($P4$) $\rightarrow$ ERB ($P5$)</td>
<td>0.031</td>
<td>0.023</td>
<td>-0.004</td>
<td>0.086</td>
</tr>
<tr>
<td>$H10$</td>
<td>DSR $\rightarrow$ EA ($P1$) $\rightarrow$ ES ($P2$) $\rightarrow$ ERB ($P3$)</td>
<td>0.007</td>
<td>0.006</td>
<td>0.001</td>
<td>0.025</td>
</tr>
</tbody>
</table>

**Notes:** Bootstrap resamples = 10,000. DSR = destination social responsibility; EA = emotional attachment; ES = experiential satisfaction; ERB = environmentally responsible behavior; $P$ = phantom variable; $b$ = unstandardized indirect estimate; SE = standard error; CI = confidence interval

**Source:** Authors’ own creation
4.3.4 Serial multiple mediating impacts. The BC bootstrapped 95% CI for the indirect effect of DSR → emotional attachment (P1) → experiential satisfaction (P2) → ERB (P3) \((b = 0.007; 95\% \text{ CI} = [0.001, 0.025])\) was significant because the 95% CI did not include zero (Table 4). Thus, \(H10\) was supported. This result highlighted that emotional attachment and experiential satisfaction sequentially mediated the link between DSR and ERB. Because the direct association of DSR with ERB (\(H4\)) was significant, emotional attachment and experiential satisfaction play a partial sequential mediating role between DSR and ERB.

5. Discussion

5.1 General findings

We proposed a research model of DSR and its consequences considering emotional attachment as a mediator between experiential satisfaction and ERB and self-congruity as a moderator that boosts the DSR → emotional attachment relationship. We tested the simple mediating and moderating effects as well as the serial mediation effects. Out of ten hypotheses, nine received support from the data collected from zoo visitors in China.

In line with attachment theory (Bowlby, 1969), DSR which is a series of positive obligations toward stakeholders (Su et al., 2017) influences tourists’ emotional attachment. The experience of social responsibility efforts of a destination by visitors forms their affective bond with the place. Our finding in this regard is in congruence with the past literature (Hu et al., 2019).

The influence of DSR on emotional attachment is higher for customers with more self-reported congruity. This confirms the moderating role of self-congruity on the aforementioned links. This is in line with past writings in contexts other than zoos which have asserted that consumers with image characteristics similar to their own are more likely to purchase goods and services that match their self-images because they bring self-image into the evaluation process (Koo et al., 2014). This finding is important because visitors’ evaluation of brand-related information affects their connection with the brand itself and can impact their decision-making (Fu et al., 2020).

Consistent with the tenets of signaling theory (Connelly et al., 2011), visitors’ perceptions of DSR and receipt of the messages of carefulness for the well-being of all make visitors satisfied. When customers realize that a destination is responsible toward employees, wildlife, the local community and tourists, they experience more satisfaction.

DSR positively influences visitors’ ERBs. This is supported by SET (Cropanzano and Mitchell, 2005) as an exchange of benefits. The more tourists experience responsible operations in destinations, the higher they will be willing to behave favorably toward the destination as an appreciation. This finding obtains support from the work of Hu et al. (2019) that has stated that DSR positively influences individuals’ attitudes and behaviors.

As SDT (Ryan and Deci, 2000) contends, attachment to a place can fulfill basic psychological needs of autonomy, competence and relatedness by satisfying the sense of identity, familiarity and belonging. Our findings suggest that emotional attachment to a zoo can lead to experiential satisfaction among visitors.

Our observation supports the idea that visitors’ emotional attachment is associated with their ERBs. As postulated by attachment theory (Bowlby, 1969), individuals’ emotional bond with a destination can motivate them to develop protective tendencies toward the place (Daryanto and Song, 2021).

The positive link between experiential satisfaction and visitors’ ERBs was another finding in this research. When visitors are satisfied with the zoo as a result of social exchanges, they respond by displaying ERBs at high levels. The research findings given here are not only consonant with SET (Cropanzano and Mitchell, 2005) but also receive support from other studies (Wu and Li, 2017).
In agreement with the reformulation of attitude theory (Bagozzi, 1992), emotional attachment mediated the effect of DSR on experiential satisfaction. Visitors who experience DSR initiatives form emotional bonds with the destination and feel satisfied.

Another finding in our study was about the mediating role of experiential satisfaction. However, this finding is not significant. An important reason for this finding comes from the fact that environmentally conscious customers do not restrict their positive contribution or ERB to their feelings of satisfaction. When visitors perceive that a destination acts responsibly, they also want to exhibit their responsibility.

Finally, emotional attachment and experiential satisfaction sequentially mediate the effect of DSR on ERB. When visitors perceive that a destination’s operation contributes to all of the stakeholders, they get emotionally attached to the destination and experience satisfaction from their visit and give back to the destination through positive behaviors such as ERB.

5.2 Theoretical implications

This research supports the notion that DSR in zoos can lead to visitors’ experiential satisfaction and foster their ERBs. The authors found the applicability of multiple mediation mechanisms and paths, including DSR → emotional attachment → experiential satisfaction → ERB and DSR → emotional attachment → experiential satisfaction → ERB. Apart from these mediating links, our study contributed to the literature that self-congruity was a moderator between DSR and emotional attachment.

Theoretically, the results enhance the literature in the following ways. DSR is an emerging phenomenon in the tourism literature (Agapito et al., 2023), and testing the influence of the concept in various destinations can enlighten and broaden our understanding of its outcomes. By gauging a serially mediated model, this study contributes to the emerging literature on DSR in the tourism field. This study confirms that the experiential attachment of zoo visitors can predict their feelings of satisfaction. Moreover, the mechanism through which DSR is related to visitors’ ERB requires further attention in the literature (cf. Lee et al., 2021; Su et al., 2018b, 2018c).

Finally, self-congruity theory is widely used in marketing. However, the existence of proportionately limited papers in the tourism literature emphasizes the observation of the various roles it can play in the field (Yang et al., 2022). This is particularly significant as the global environmental consciousness among consumers has built a completely new market demand for responsible service.

5.3 Managerial implications

The findings reported above result in several implications for practice. First, the management of zoos should use DSR communication strategies more proactively to make visitors become well-aware of their economic, philanthropic, environmental and social activities in the host community. For example, including a separate link in zoos’ web pages that share regular updates reporting zoos’ socio-environmental performance can be very helpful.

Second, zoos should recruit local employees to contribute to the economy of the host society. This action can show the direct contribution of tourism activities to the local economic well-being and would be considered as one of the corporate social responsibility initiatives. Third, to foster customers’ emotional attachment, zoos can take some actions. For example, allowing visitors to watch feeding cubs and preparing postal cards that show cubs and sharing these cards with visitors as well as using guides who share emotional stories about animals with visitors can all help visitors to get more emotionally attached to zoos.

Fourth, the management of zoos can prepare an observation office with glassy windows where visitors may be able to view and see surgery or other animals assisting procedures
as they occur at the destination. Fifth, the use of sustainable practices within zoos such as avoiding plastic products in cafes and restaurants in the zoo and establishing recycling tools next to service-providing centers can send signals to visitors about the environmental commitment of zoos.

Sixth, considering the important role of visitors’ satisfaction in ERB, destination managers need to constantly evaluate visitors’ level of satisfaction and provide satisfactory visitor experiences. This evaluation can be conducted using both zoos’ official webpages or social media channels and on-site surveys from visitors through asking experiential satisfaction measurement tools. Destination managers should also continuously observe the visitors’ comments from various platforms such as TripAdvisor to be aware of visitors’ concerns and suggestions.

Seventh, by promoting an awareness of the needs of tourist destinations, their communities and the environment, destination management organizations, tour operators and hoteliers can encourage tourists to engage in eco-friendly behaviors. This can be more effective if these organizations craft messages that appeal to the emotional attachment of the tourists. For example, “protect the environment and save innocent cubs” can be used in different zones of the destination.

Finally, as ecological issues have been recognized as one of the priorities in China, governmental authorities should encourage destinations to be more careful about their social responsibilities. This can be started by making appropriate rules and regulations in support of DSR and allocating certificates of appreciation for highly responsible tourist destinations.

5.4 Limitations and future research

This study did not use various dimensions of self-congruity known as actual and ideal self-congruity. This can be an avenue for future research to consider the moderating role of various congruity types. This study used cross-sectional data. Because this practice does not allow making causal inferences, in future research, collecting longitudinal data would be useful. Replication of empirical pieces with larger sample sizes in different destinations would broaden the database on DSR and its potential outcomes.

Acknowledgment

Data collection for this project was carried out while the third author was a Visiting Researcher at the Guangdong University of Technology in China. The authors thank Professor Zhi Li (Guangdong Provincial Key Laboratory of Computer Integrated Manufacturing System, School of Electromechanical Engineering, Guangdong University of Technology) for his kind assistance in enabling the third author to contact management of hotels. The authors also thank Ms Liu Siai in the School of Foreign Languages and Mr Zonggui Tian in the School of Electro-Mechanical Engineering (both at the Guangdong University of Technology in China) for their assistance in data collection.

Author contributions

Osman M. Karatepe: conceptualization and model development, methodology, writing – original draft, supervision, critical revision and editing, and final approval; Hamed Rezapouraghdam: conceptualization and model development, writing – original draft, critical revision and final approval; Raheleh Hassannia: data collection, writing – original draft and final approval; Taegoo Terry Kim: formal analysis, writing – original draft, critical revision and final approval; Constanța Enea: resources, writing – original draft and final approval.
References


Appendix. Measurement items and their sources

1. **Destination social responsibility (Su et al., 2018c)**
   - DSR1. Guangzhou Zoo seems to include environmental concerns in its operations.
   - DSR2. Guangzhou Zoo seems to give back to the local community.
   - DSR3. Guangzhou Zoo seems to be successful in their profitability.
   - DSR4. Guangzhou Zoo seems to treat its stakeholders well (employees, visitors, ...).
   - DSR5. Guangzhou Zoo seems to be based on ethical values and beyond legal obligations.

2. **Emotional attachment (Thomson et al., 2005)**
   - EA1. Affection
     - Affectionate
     - Loved
     - Friendly
     - Peaceful
   - EA2. Connection
     - Attached
     - Connected
     - Bonded
   - EA3. Passion
     - Passionate
     - Delighted
     - Captivated

3. **Experiential satisfaction (Wu et al., 2018)**
   - ES1. This zoo goes beyond my expectations.
   - ES2. I really like this trip to this zoo.
   - ES3. It is worthwhile to be here.
   - ES4. Today is really a nice day.

4. **Environmentally responsible behavior (Su and Swanson, 2017)**
   - ERB1. I comply with relevant regulations to not destroy the Guangzhou Zoo’s environment.
   - ERB2. I report to the Guangzhou Zoo’s administration any environmental pollution or destruction.
   - ERB3. When I see garbage in Guangzhou Zoo, I will put them in the trash bin.
   - ERB4. If there are environment cleaning activities, I am willing to attend.
   - ERB5. I try to convince partners to protect the natural environment on Guangzhou Zoo.
   - ERB6. I try to not disrupt the fauna and flora in Guangzhou Zoo.

5. **Self-congruity (Sirgy et al., 1997)**
   - SC1. I completely identify myself with the experience I lived during this visit.
   - SC2. I identify myself with the people who chose this place.
   - SC3. Living this kind of experience is consistent with how I like to see myself.
   - SC4. The experience I lived corresponds to how I like others to see me.
About the authors
Osman M. Karatepe, PhD, is Professor of Marketing in the Faculty of Tourism at Eastern Mediterranean University. His research interests are in the areas of services marketing and management, internal marketing, green management and marketing, and strategic management. He is the Managing Editor of the Journal of Hospitality and Tourism Insights and the Regional Editor for the Middle East and Africa of the International Journal of Contemporary Hospitality Management.

Hamed Rezapouraghdam, PhD, is Assistant Professor in the Faculty of Tourism at Eastern Mediterranean University. His research interests are in the areas of sustainable tourism, destination management, environmental psychology and corporate sustainability.

Raheleh Hassannia obtained her PhD in tourism management from Eastern Mediterranean University. Her research interests include sustainable tourism, destination management, the application of information technology in tourism and hospitality, smart tourism and innovation management.

Taegoo Terry Kim, PhD, is an Assistant Professor in the Department of Global Business, School of Global Eminence at Kyung Hee University. His research interests are in the areas of service marketing and management, positive organizational scholarship, green management and marketing. Dr Kim is the Coordinating Editor of the International Journal of Hospitality Management. Taegoo Terry Kim is the corresponding author and can be contacted at: tgkim@khu.ac.kr

Constanța Enea obtained her PhD from Economics University of Craiova, Faculty of Economics (Dolj County, Romania). Her research interests include tourism economics, service management, resources and tourist destinations, consumer behavior, marketing services, market studies and research and ethics and business conduct.

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com