Environmental CSR, Customer Equity Drivers, and Travelers' Critical Outcomes: A Stimulus–Organism– Response Framework

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Abstract

While environmental corporate social responsibility (CSR) has gained increased attention in sustainable tourism research, little is known about its impacts on customers in the context of the airlines. This study investigates the impact of environmental CSR on two critical customer outcomes, namely, purchase intention (PI) and switching behavior (SB).
In light of the stimulus–organism–response (S-O-R) framework, this study further examines the joint mediating impact of customer equity drivers (CEDs) in the previously mentioned relationships. With a sample of Iranian air travelers, the results of the structural equation model revealed that environmental CSR significantly affects CEDs. While CEDs predict PI, they failed to reduce SB. Hence, CEDs jointly mediate the impact of environmental CSR on PI only. The results of the current study reveal nuances in the service marketing research by extending the impact of environmental CSR on travelers' PI and SB via CEDs. Theoretical and practical implications are provided.

Keywords

environmental CSR, customer equity drivers, traveler behavior, airline industry, S-O-R framework.

Introduction

The airline industry has emerged as a fast-growing sector and experienced an average annual growth of 5% over the last two decades (Kumar & Gupta, 2020). The airline industry in particular is the most attractive mode of transportation for travelers with 12.5 million travelers being transported each day in 2019. The contribution of the airline industry to tourism development is projected to cover about 10 billion travelers each year by 2050. These figures reflect the significant contribution of the air transport sector to the global gross domestic product, which has been %4.1 in a normal year (ATAG, 2020). Nevertheless, the practices and operationsof the tourism industry in general (Xiong et al., 2022) and the airline industry in particular (Hwang & Choi, 2021; Kim, Lee & Roh, 2020, Lee & Park, 2019) have produced negative consequences, such as air pollution, climate change, global warming, noise pollution, greenhouse gas emissions, and environmental disruptions.
As a notable example, airlines generated 895 million tons of carbon dioxide (CO2) worldwide in 2018, and it is estimated that air transport's contribution to CO2 global emissions reaches 22% by 2050 (Chuah et al., 2020). Hence, there is great concern among stakeholders regarding the significant environmental footprint of airlines urging them to align their operations to sustainability principles (e.g., International Air Transport Association (IATA), 2021, 2022). Airlines are mainly service-oriented (Jing & Moon, 2021), and consistent with the service-dominant logic of marketing (Vargo & Lusch, 2004, 2017), they are required to fulfill the needs of stakeholders continuously and satisfy their interests to generate sustainable wealth and create value (Garriga, 2014; Jang, 2022).
Environmental corporate social responsibility (CSR) is an integral part of CSR (Flammer, 2013) that deals with firms' proactive initiatives to impose a positive impact on the environment (Islam et al, 2018). Environmental CSR is usually driven by several factors, such as rivalry among competitors, market pressures, and stakeholders' environmental consciousness (De Roeck & Delobbe, 2012; Prasad et al., 2019), that can affect consumers'

purchasing behavior, consumption patterns, and postpurchase decisions (Han, Al-Ansi, et al., 2020;
Han, Chi, et al., 2020). Therefore, companies with a high reputation in environmental CSR are more likely to decrease the level of customer switching behavior (SB) and improve the firm's image among customers (Han et al., 2019a).
More important, environmental responsibility, among various components of firms' responsibility, is the most significant factor in determining the level of competitiveness among different service providers (Park et al., 2016). This could be because the number of customers who engage with and react to a company's CSR initiatives is rapidly increasing (Chomvilailuk & Butcher, 2021; D'Acunto et al., 2020).
This is particularly the case in the airline industry, where travelers increasingly choose airlines that incorporate environment- friendly activities (Niu et al., 2016). Therefore, airlines must emphasize the need for environmental CSR and build a green image to positively influence customers' purchase intention (PI) while reducing their SB.
The impact of environmental CSR has been tested in industries such as the fashion industry (Sun et al., 2014), the retail industry (Godefroit-Winkel et al., 2022), the hospitality industry (D'Acunto et al., 2020; Rhou & Singal, 2020), and the general service sector (Jeon et al., 2020). However, previous research remains scarce in exploring the impact of environmental CSR as an important concern that could potentially influence customer equity and lead to critical behavioral outcomes in the airline industry. Considering the negative environmental impacts of the airline industry (Kim, Lee & Roh, 2020) and an urge to pursue environmental CSR in the service industry (Schill & Godefroit-Winkel, 2022), such a void in tourism sustainability literature sounds significant.
The airline industry is a strong facilitator of tourism development (Papatheodorou, 2021), and sustainable tourism literature should take into consideration the significant environmental impacts of the airline industry and offer solutions for eco-friendly traveler behavior. In essence, airlines are required to consider travelers' environmental concerns and consciousness and promote environmental activities to establish a strong and long-term relationship with their travelers.
Customer equity is a tool for service organizations for maintaining such a relationship with their customers that "serves as an institution's (i.e., a firm's or a destination's) key strategic initiative to achieve long-term marketing success, and it represents values generated from the institution's current and potential customers/tourists by maintaining a prolonged relationship with them" (Wong et al., 2021, p. 5).
Customer equity can be gauged by its drivers manifested by value equity, brand equity, and relationship equity (Ho & Chung, 2020; Rust et al., 2004). Nevertheless, customer equity research is in a "state of beginning," and empirical research is called for to investigate the antecedents of customer equity drivers (CEDs) in the service marketing literature (Lee & Park, 2019, p. 179).
Against this realization, this study uses a stimulus–organism– response (S-O-R) framework (Mehrabian & Russell, 1974) to contribute to the sustainable tourism literature by theoretically developing and empirically testing a conceptual model that treats CEDs as the mediator of the impact of environmental CSR on travelers' PI and SB. Hence, the purpose of this study is to investigate the impact of (a) environmental
CSR on CEDs, (b) CEDs on PI and SB, and (c) the mediating role of CEDs in the relationship among environmental CSR, PI, and SB.

Contributions of the Study

This study contributes to sustainable tourism research in several ways. First, in light of rising consumer awareness about tourism sustainability (Font & McCabe, 2017), it seems plausible

to study the mechanism that affects travelers' behavioral response to environmental factors in terms of PI (Zhuang et al., 2021) and SB (Hussain et al., 2022) for improved financial performance (Olya et al., 2021). In this regard, the proposed conceptual model acts as a response to the call for more empirical research to test the process in which environmental CSR can result in consumer behavioural outcomes in travel and tourism research (Chuah et al., 2020).

Specifically, this study advances the current understanding of environmental CSR by drawing insights from the airline industry to fill in the void appertaining the impact of environmental CSR in the context of airlines.

Second, this study draws insights from the Iranian air transportation market to respond to the call for more research on Asian contexts representing developing economies (Olya et al., 2021). National culture and geographical region are assumed to have distinct impacts on the consumer decisionmaking process (Modica et al., 2020). This study uses the concept of environmental CSR to investigate the perception of eco-friendly practices implemented by airlines and assess the impact of environmental CSR on fostering CEDs using a sample of travelers in Iran.

Third, underpinned by the S-O-R framework and in response to the call for more research concerning customers' perception of favorable sustainability strategies (Sun et al., 2020), this study advances the current knowledge about the mechanism (CEDS as the organism) through which environmental CSR (stimulus) can positively promote traveler eco-friendly behavior in terms of PI (positive response) and adversely affect travelers' SB (negative response).

Finally, Zhuang et al. (2021) referred to the inconsistencies in studying consumers' green PI and called for research addressing the antecedents of such behavior in service marketing literature. Moreover, Hussain et al. (2022) argued that the environmental factors affecting consumers' SB deserve more research attention. Hence, the application of PI and SB as critical outcome variables is a response to the dearth of research in relatively less investigated areas.

Literature Review and Hypothesis Development

S-O-R Framework

First developed by Mehrabian and Russell (1974), the S-O-R framework is an environmental psychology theory that has been extensively used in service marketing literature to understand consumer responses to different stimuli (Ortegón- Cortázar & Royo-Vela, 2019; Vieira, 2013). While extensively applied theories such as the theory of reasoned actions (Azjen & Fishbein, 1980) and the theory of planned behaviour (Fishbein & Ajzen, 1977) in tourism sustainability research (Han, 2021) fail to underline the cognitive, emotional, and psychological mechanisms in the customer decision-making process, the S-O-R framework is a powerful approach for investigating the complex nature of the customer decisionmaking process (So & Li, 2020).

According to Mehrabian and Russell (1974), stimuli from the firms (*S*) would tackle consumers' internal states (*O*), bringing about various attitudinal and behavioral responses (*R*). While stimuli are the signals sent by the firm and are external to the individual customers, they could affect how customers feel about the firm and ultimately alter their response. Schill and Godefroit-Winkel (2022) argued that environmental CSR can play a role (*stimuli component*) to represent the characteristics of the firm and result in enhanced customer experience. It is assumed that an established level of CEDs (*organism component*) in turn would influence critical customer outcomes (*response component*).

Despite the strength of this framework to address emotions and cognitions (*organism component*; Mehrabian & Russell, 1974; Yoo et al., 1998), the empirical evidence conferring CEDs as the cognitive organism component is lacking in travel and tourism research. The

mediating application of CEDs as the organism relating firms' strategies to consumers' attitudes, cognitions, and behavior is well documented in the extant literature (e.g., Sun & Ko, 2016; Sun et al., 2014; Vogel et al., 2008; Wong et al., 2021); however, the impact of CEDs have been largely tested in isolation. As shown in Figure 1, this study fills the void by treating CEDs as a second-order construct to demystify CEDs as the joint mediator of the impact of environmental CSR on a positive (i.e., PI) and a negative (i.e., SB) outcome among travelers.

Stimulus: Environmental CSR

CSR as a part of organizations' sustainable practices includes economic, social, and environmental dimensions (Habitzreuter& Koenigstorfer, 2021). Indeed, CSR could be defined as a series of measures adopted by corporations to promote social good and meet the stakeholders' needs (Chuah et al., 2020).

However, the activities and practices of the corporations could have adverse effects on the natural environment, and therefore, CSR practices toward the environment are generally of primary importance (Murshed et al., 2021). Environmental CSR refers to "company's business activities in a manner, which is coherent with environment protection and complies with local regulations and governmental policies" (Han, 2021, p. 1029), and usually includes different forms of recycling, spurring sustainable consumption, lowering emissions, and promoting the environment. In the same vein, the corporations' engagement in eco-friendly activities represents the fact that they strive to make necessary changes in their strategies to align their offerings with the rising environmental concerns and awareness among customers (Eid et al., 2021; Nimri et al., 2020). Having said that, drawing on the resource dependency theory, firms are not capable of meeting all their needs internally, and they are heavily reliant on their external environment to provide resources (Kassinis & Vafeas, 2006). Nevertheless, resource allocation could cause damaging impacts on the environment.

Hence, there is a need for organizations to buffer the negative environmental effects caused by their operations and establish an improved relationship with their stakeholders to benefit greatly from them. The organizations' CSR initiatives toward the environment could improve the organizational reputation and consumers' satisfaction (Park, 2019; Park et al., 2016), as well as alter consumers' attitudes and behavior positively (Han, Chua, et al., 2020). Such an attitude change among customers could be even more salient in light of the rapidly growing number of consumers with extensive concern for the ecological environment. Such consumers often show a great tendency to patronize the products and services offered by firms that are environmentally and socially responsible (Han & Yoon, 2015; Park, 2019). The tendency to support environmentally responsible organizations provides a revealing insight regarding how nonmonetary factors could influence customers' purchase decisions to use a product or service. According to Hu et al. (2011), customers experience functional and emotional value when utilizing a product or service. Although the functional value is generated with quality and price, the emotional value is developed from the feelings or affective states that a product or service produces.

Therefore, customers with a green consumption tendency are more likely to endorse organizations with an effective environmental CSR approach and patronize their products and services since it is compatible with the environment and generates a good feeling (Habitzreuter & Koenigstorfer, 2021).This is particularly true in the case of the airline industry, as travelers are not generally disposed to support airlines with a poor reputation in terms of environmental CSR (Han, Al-Ansi, et al., 2020). According to Sun et al. (2020), creating an eco-friendly image and offering green products increase the level of customer equity among Chinese customers. However, Sun et al. (2014) suggest that in the fast fashion industry, firms' environmental practices may not be easily perceived by customers as

opposed to heavy industries. This highlights the fact that airlines with a high level of carbon footprints require to implement environmental CSR activities significantly to increase customer equity. This is consistent with the study of Han, Al-Ansi, et al. (2020), in which they infer that environmental responsibility in the airline industry is the most significant representative of the airline's CSR activities. More interestingly, Lee (2016), applied neuromarketing and argued that CSR messages provoke favourabl responses in customer due to the feeling of empathy, which could enhance customer equity related to pro-social brands. Hence, the following hypothesis is expected:
H1: Environmental CSR is positively related to CEDs.

Organism: CEDs
Customer equity can be understood in light of its drivers, namely value equity, brand equity, and relationship equity (Blattberg & Deighton, 1996). Value equity is the measure of a customer's objective assessment of gains and losses (Lemon et al., 2001; Sun et al., 2020). Brand equity is established through subjective meanings and indicates customers' intangible assessments (Ou et al., 2020; Wang et al., 2019). Relationship equity as the third driver of customer equity refers to establishing a customer relationship and the tendency of the customer to use the brand (Lemon et al., 2001; Sun et al., 2020). Based on the concept of customer lifetime value (CLV), customer equity plays an important role in gaining a competitive advantage (Sun et al., 2020).
Airlines are required to consider CLV, which refers to the "net present value of the stream of future profits expected over the customer's lifetime purchases" (Sun et al., 2020, p.2), to increase customer retention rate and attract potential customers in the competitive air transportation market environment.
As a general assumption, PI as a tendency to buy products is concerned with the behavior, perceptions, and attitudes of customers (Holehonnur et al., 2009; Zhuang et al., 2021). Therefore, it is assumed that PI can be influenced by the price, quality, and value of the products. Consistently, the significant impact of customer equity on PI is well established in the current literature (e.g., Ho & Chung,
2020; Holehonnur et al., 2009; Majeed et al., 2021; Rust et al., 2004).
That is, customers' objective assessment through value equity and their subjective perception in the form of brand equity could have a direct impact on the PI (Irshad, 2012). Using the insight from sustainability literature, Kazmi et al. (2021) suggested that positive green brand equity has a significant effect on the PI of green brands. In a similar vein, Chen and Chang (2008) used a sample of international air travelers' in Taiwan to demonstrate brand equity has a direct impact on their PI. Therefore, the following hypothesis is expected:

H2: CEDs are positively related to travelers' PI.

An extremely competitive and broadly proliferated market with several brands is the grim reality that nowadays marketing managers are engaged with. Not surprisingly, aviation is also considered one of the aggressive markets (Singh, 2021) in which consumers are being derived to switch more frequently between brands. Correspondingly, businesses lose about 50% of their consumers every 5 years while being unable to describe the applicable basis for brand SB (Saeed & Azmi, 2019). The idea of switching is considered a negative factor by service providers, and as a result, it has gained established attention from researchers (Tiamiyu et al., 2020). Nevertheless, few pieces of research have concentrated on green SB in the context of airlines (Wu et al., 2018). According to Bansal and Taylor (1999), SB represents the action of changing or replacing the current service provider with an alternative

supplier. As such, SB, as an opposite construct of loyalty, can mainly produce unfavorable outcomes for providers and suppliers (Han et al., 2011). In essence, SB can be influenced by cultural factors, which highlight the fact that individuals with distinct cultural backgrounds may think, feel, and respond differently (Minkov & Hofstede, 2012). Having this in mind, Saeed and Azmi (2019) argued that customer equity affects the brand SB of Muslim consumers within the context of the two different cultures of Pakistan and Malaysia. They found that switching intention positively mediates the association between customer equity and brand SB. Furthermore, Jung et al. (2017), in a study of travelers' SB, applied the push–pull–mooring migration theory and found that pulling factors including attractiveness and availability of alternatives and mooring factors such as switching cost and variety-seeking tendency have a significant impact on traveler SB. In a similar vein, Wu et al. (2016) propose that green equity can enhance green satisfaction and affect the green switching intention negatively. Therefore, the following hypothesis is expected:

H3: CEDs are negatively associated with travelers' SB.

The Mediating Role of CEDs

Underpinned by the S-O-R framework and in light of the earlier discussion, it can be inferred that CEDs play a mediating mechanism in the relationship between environmental CSR as the stimulus and PI and SB as the positive and negative response, respectively. It is assumed that customers reward businesses that are engaged with CSR practices and have an eco-friendly image (De Roeck & Delobbe, 2012). Such behaviors among customers could be due to the reason that firms' environmental CSR influences customers positively and spur them to establish a supportive relationship with the organization (Christis & Wang, 2021; Habitzreuter & Koenigstorfer, 2021). Customers' favorable reactions toward firms can be evidenced by indicating a higher level of PI. According to Christis and Wang (2021), environmental CSR practices can have a positive impact on customers' PI. Furthermore, extant literature suggests that customers with more environmental involvement and consciousness appear to have higher PI toward companies with improved environmental performance (Christis & Wang, 2021; Grimmer & Bingham, 2013). Nevertheless, environmental CSR might not be a sufficient tool to directly tackle PI. Hence, the mediating role of CEDs in the association between environment CSR and PI is considered to better justify the link between environmental CSR practices and customers' PI.

According to Moise et al. (2019), companies' environmental practices influence brand equity and boost customer satisfaction. Such practices would also help customers shape positive relationships and feelings toward environmentally responsible organizations, which could result in higher levels of customers' PI (Ramesh et al., 2019). Such an argument is particularly valid for customers living in a collectivist society who have a great tendency and higher PI toward buying products and services that are consistent with their subjective norms. Such customers have strong cohesive links with other people and feel more engaged with groups (Ruiz-Mafe et al., 2013). This tendency toward following the social norms in collectivistic cultures and societies becomes more practical for firms when environmental consciousness becomes a social norm (Liere & Dunlap, 1980). This means that firms with an emphasis on CSR can take consumer equity forward regarding their environmentally friendly activities and, in turn, will experience higher levels of PI among their customers. Thus, the following hypothesis is expected:

H4: CEDs mediate the impact of environmental CSR on travelers' PI.

The existing pool of customers has long been considered a significant asset for businesses. Accordingly, customer retention is essential to ensure that customers will not be attracted by competitors (Han, Shim, et al., 2019). As Keaveney (1995) argued, the reason for customers' SB could be different due to well-established differences between goods and services. By and large, customers exhibit SB in the service industry for service failures, inconvenient services, inflated prices, and ethical problems. One possible solution to tackle the issue of SB is to adapt CSR activities. For instance, companies in the airline industry with high carbon footprints choose to exercise CSR environmental activities (Jing & Moon, 2021), which may be more useful in reducing customer SB than traditional marketing mix attributes, such as promotion. In other words, when firms undertake different types of CSR activities, they are more likely to succeed financially (Ghaderi et al., 2019), and environmentally conscious customers may be reluctant to display SB. Particularly, the impact of environmental CSR activities on customers' SB can be mediated through the CEDs. Companies strive to improve their brand image and build brand equity since higher levels of brand equity may lead to lower levels of customers' SB.
This statement is valid because customers, particularly in collectivist societies, prefer to consume products and services from businesses with high brand reputations since they can meet their social needs and gain face (Liao & Wang, 2009). Furthermore, firms with a high reputation in environmental CSR are more likely to reduce customer SB (Han et al., 2019a). Thus, the following hypothesis is expected:

H5: CEDs mediate the impact of environmental CSR on travelers' SB.

Methods

Sampling and Data Collection

The data were collected from a convenient sample of travellers in two main airports in Tehran, the capital city of Iran. Travelers were asked to consider the airline they are planning to fly with and answer the questionnaire items accordingly. This would help reduce the impact of recall bias (Rylander et al., 1995). In particular, the questionnaire was distributed among travelers with a cover letter explaining the aims of the study and assuring the confidentiality of responses. Respondents were instructed that there are no right or wrong answers to the questionnaire items, with all scale items ordered counterbalanced. The aforementioned remedies were adopted to avoid the common method bias (Johnson et al., 2011; Podsakoff et al., 2003).
In all, 500 questionnaires were distributed among travelers, and 398 usable responses were returned. This yielded a 79% response rate. Respondents were spread across age groups ranging from 17 to 25 years (24.6%), 26 to 33 years (40.7%), 34 to 41 years (22.1%), and the rest were 41 years old or older. Forty-five percent of respondents were male, and the rest were female. More than half of the respondents (62.3%) were married, and the rest were single/divorced. Respondents also spanned across education levels, with 11% having high school or an associate degree, 34% having an undergraduate degree, 44% having a postgraduate degree, and the rest having a doctorate. Respondents were asked to indicate their ticket type as well. The majority of the respondents (81.4%) were flying in economy class, while the rest were flying in business (11%) and first class (7.5%).

Operationalization of Scale Items

Environmental CSR was measured using six items from Alvarado-Herrera et al. (2017). CEDs were operationalized with ten items from Gao et al. (2020). CEDs are manifested through the value equity of the customer (3 items), the brand equity of the customer (3 items), and the relationship equity of the customer (4 items). Three items from (Zhang et al., 2009)

were used to measure traveler SB, and four items from (Dodds et al., 1991) were adopted to measure PI. The previously mentioned scale items were measured with a 7-point Likert scale ranging from "1 = *strongly disagree*" to "7 = *strongly agree*." The questionnaire items, including measurement scales, to capture travelers' demographic characteristics are presented in the Appendix. The questionnaire was subject to a pilot study with 25 travelers to ensure that there were no difficulties in understanding the scale items. No changes were made to the questionnaire items as a result of the pilot study. Specifically, the questionnaire items were presented in Farsi using the backtranslation method (Brislin, 1970).

Analysis

A two-step approach was taken in the current study. The first step included confirmatory factor analysis (CFA) of the measurement model (Anderson & Gerbing, 1988), and the second step incorporated hypothesis testing using structural equation modeling (SEM) estimation. Harman's one-factor model was utilized to ascertain the potential impact of common method bias. Consistent with the current literature (e.g., Han et al., 2019b), the impact of gender has been controlled in the study relationships. In addition, this study applied a one-way analysis of variance (ANOVA) test to determine the distinctions in traveler behavior across three types of flights, namely, first class, business class, and economy class. According to Li et al. (2020), there is a limited understanding of how individuals across different market segments would respond to firms' environmental CSR. In addition, there is a piece of ample evidence showing travelers' intentions and reactions to an airline's service attributes differ across classes of flight (Brochado et al., 2019; Hwang & Hyun, 2017; Sezgen et al., 2019). Hence, assessing the proposed study relationships across the three types of flight would draw more insights into the impact of environmental CSR on CEDs and travelers' responses in the context of the airline industry. SPSS 26 was used to report the descriptive statistics of responses and correlations among study variables. In addition, AMOS 26 was used to capture the SEM results.

Results

Measurement Model Estimation

As a result of CFA, the proposed measurement model, including all study variables, revealed good fit statistics ($\chi2 = 617.995$, $df = 208$, $\chi2 / df = 2.971$, comparative fit index [CFI] = 0.962, parsimony comparative fit index [PCFI] = 0.791, root-mean-square error of approximation [RMSEA] = 0.07; Bagozzi & Yi, 1988). Specifically, the second factor model for CEDs ($\chi2 = 70.230$, $df = 24$, $\chi2 / df = 2.92$, CFI = 0.989, PCFI = 0.527, RMSEA = 0.07) was deemed acceptable for its significant fit statistics. According to the results of CFA, all factor loadings were significantly loaded above the cutoff level of 0.5 on their corresponding latent variable, ranging from 0.702 to 0.969. Consistent with Fornell and Larcker (1981), the average variance extracted by all items was deemed acceptable, as they have been equal to or greater than 0.5. The composite reliability of all scale items exceeded the minimum cutoff level (i.e., 0.60) recommended by Bagozzi and Yi (1988), and each coefficient alpha was larger than the 0.70 threshold.

In all, the results suggest that the measurement model has convergent validity. Table 1 represents the information regarding the convergent validity of the proposed measurement model (Bagozzi & Yi, 1988; Fornell & Larcker, 1981). Discriminant validity of the measurement model was also evident since none of the correlations between the pairs of study variables was greater than the square root of their corresponding average variance extracted (AVE) score (Fornell and Larcker's, 1981, criterion). The correlation among study variables is reported in Table 2. Common method bias was controlled using Harman's one-factor test with unrotated exploratory factor analysis. The first factor accounted for only

33.36% of the total variance. Since it is below 50% (Fuller et al., 2016), the common method bias could not be a concerning issue.

SEM Estimation

The partially mediated model was compared with the hypothesized model. The assessment of model fit statistics with the chi-square difference test revealed that the difference between the partially mediated model ($\chi2 = 627.488$, $df = 211$, $\chi2/df = 2.97$) and the hypothesized model ($\chi2 = 621.548$, $df = 209$, $\chi2/df = 2.97$) with 2 degrees of freedom was not significant. Accordingly, the hypothesized model ($\chi2 = 627.488$, $df = 211$, $\chi2/df = 2.97$, CFI = 0.96, PCFI = 0.80, RMSEA = 0.07; Bagozzi & Yi, 1988) was used for the SEM estimation. This study assessed the joint mediating impact of CEDs in the association between environmental CSR, PI, and SB. As depicted in Figure 2, relationship equity ($\lambda = 0.965$) is the most significant indicator of CEDs. This is followed by value equity ($\lambda = 0.938$) and brand equity ($\lambda = 0.887$). Hypothesis 1 concerning the positive impact of environmental CSR on CEDs was supported ($\beta = 0.574$, $t = 11.61$). Hypothesis 2, which addressed the direct impact of CEDs on PI ($\beta = 0.776$, $t = 12.95$), was significantly supported by the empirical data. Nevertheless, the impact of CEDs on SB ($\beta = -0.12$, $t = -1.82$) was not empirically supported. Therefore, Hypothesis 3 was rejected. Hypotheses 4 and 5 proposed that CEDs jointly mediate the impact of environmental CSR on travelers' PI and SB, respectively. To test these hypotheses, the direct impact of environmental CSR on PI and SB was tested first. The statistical results revealed that environmental CSR does not exert a significant impact on PI ($\beta = -0.09$, $t = -1.05$) and SB ($\beta = 0.09$, $t = 1.48$). Hence, the indirect impact of environmental CSR on PI and SB via the mediating role of CEDs was assessed using the Sobel test. The results revealed that CEDs fully mediate the impact of environmental CSR on PI ($z = 8.64$). This provides empirical support for Hypothesis 4.

Table 1. Convergent Validity Estimates and Internal Consistency Results.

Scale Items	Factor Loadings	AVE	CR	Cronbach's Alpha
Environmental CSR		0.864	0.974	0.97
Item 1	0.913			
Item 2	0.878			
Item 3	0.969			
Item 4	0.937			
Item 5	0.956			
Item 6	0.920			
CEDs				
CEDs—Value equity	0.936	0.755	0.902	0.90
Item 1	0.862			
Item 2	0.879			
Item 3	0.866			
CEDs—Brand equity	0.889	0.817	0.931	0.90
Item 1	0.939			
Item 2	0.889			
Item 3	0.883			
CEDs—Relationship equity	0.966	0.758	0.926	0.92
Item 1	0.808			
Item 2	0.923			
Item 3	0.884			
Item 4	0.864			
Purchase intention		0.854	0.959	0.96
Item 1	0.881			
Item 2	0.931			
Item 3	0.937			
Item 4	0.947			
Switching behavior		0.702	0.875	0.87
Item 1	0.702			
Item 2	0.900			
Item 3	0.896			

Note. AVE = average variance extracted; CR = composite reliability; CSR = corporate social responsibility; CED = customer equity drivers. Kaiser– Meyer–Olkin measure of sampling adequacy: 0.934; Bartlett's test of sphericity sig: .000. All data have been normally distributed. The variance inflation factor estimation for environmental CSR (1.49) and CEDs (1.48) as manifested by brand equity (3.10), value equity (3.01), and relationship equity (3.79) revealed that the multicollinearity is not a concerning factor (Hair et al., 2010).

Table 2. Descriptive Statistics and Correlations.

	Environmental CSR	CEDs	PI	SB	Gender
Environmental CSR	1	.571**	.355**	−.004	.067
CEDs		1	.658**	−.029	0.035
PI			1	−.067	.132**
SB				1	.122*
Gender					1
Mean	4.829	4.710	5.167	4.667	3.261
Standard deviation	1.756	1.553	1.645	1.575	1.107

Note. CSR = corporate social responsibility; CED = customer equity drivers; PI = purchase intention; SB = switching behavior.
*Correlation is significant at the 0.05 level (two-tailed). **Correlation is significant at the 0.01 level (two-tailed).

However, Hypothesis 5 was rejected, since CEDs exert no mediating effect in the relationshipbetween environmental CSR and SB. In addition, the impact of gender was controlled for statistical confounds. The results showed that the impact of gender on CEDs, PI, and SB was not significant. Moreover, a one-way ANOVA was performed to assess the differences in CEDs, PI, and SB across three types of flights, including first class, business class, and economy class. According to the results, there was a significant difference across groups conferring CEDs ($F = 4.98$, $p < 0.01$) and PI ($F = 5.092$, $p < 0.01$).
The results of Tukey's posthoc analysis further revealed a significant difference between travelers flying in economy class and first class in terms of CEDs ($p = 0.030$) and PI ($p = 0.018$). As shown in Figure 3, travelers flying in economy class (coded 3) tend to demonstrate lower CEDs and PI, respectively. Nevertheless, the results revealed a none significant difference across flight types concerning traveler SB (p = 0.938). In all, the proposed SEM explains 33% variance in CEDs, 52% variance in PI, and relatively a limited variance (i.e., 1%) in SB.

Discussion

This study successfully contributes to the service marketing literature, in general, and sustainable tourism literature, in particular, by theoretically developing a conceptual model and empirically examining the relationship among environmental CSR, CEDs, PI, and SB.

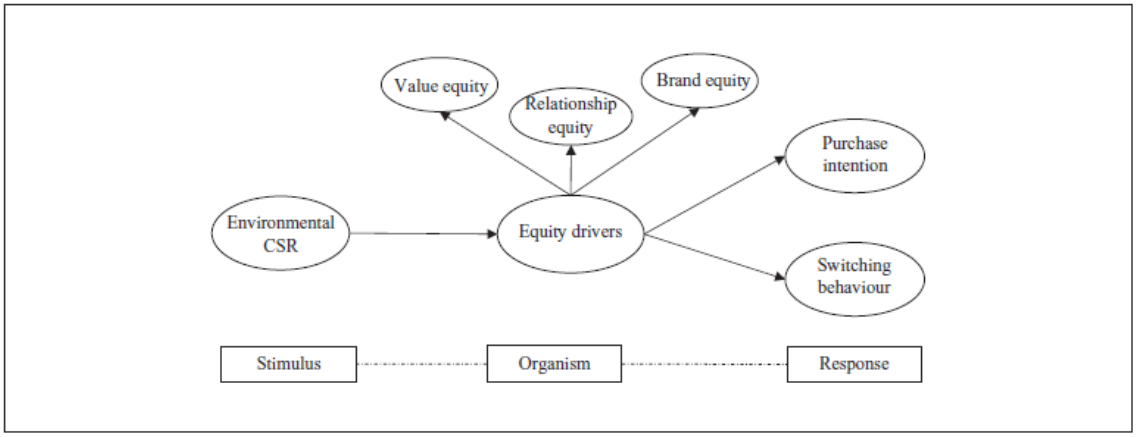

Figure 1. Conceptual model.

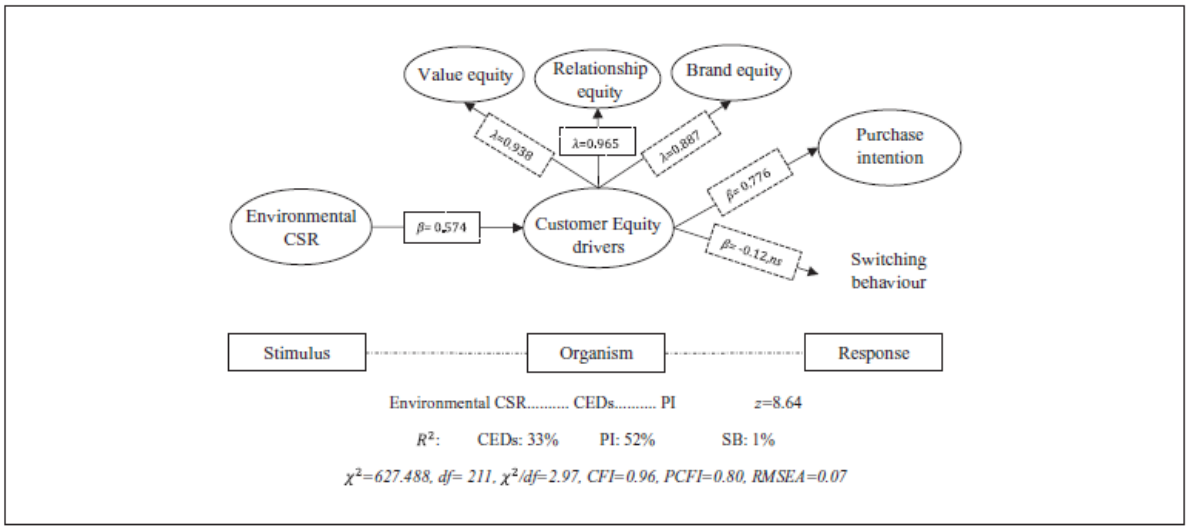

Figure 2. Structural parameter estimates.

Note. CFI = comparative fit index; PCFI = parsimony comparative fit index; RMSEA = root-mean-square error of approximation; *ns* = not significant.

Underpinned by the service-dominant logic of marketing (Vargo & Lusch, 2004, 2017) and the S-O-R framework (Mehrabian & Russell, 1974), the current research extends the growing body of knowledge in sustainable tourism literature by examining the joint mediating role of CEDs as manifested by brand equity, value equity, and relationship equity in the relationships between environmental CSR, travelers' PI, and SB in the airline industry. Environmental CSR plays a major part in establishing an appropriate relationship with customers and creating an eco-friendly image.

The airline industry is an integral pillar of tourism development (Papatheodorou, 2021), and its negative environmental impacts contribute to the overall environmental concerns associated with tourism. In line with the extant literature (e.g., Sun et al., 2014, 2020; Sun & Ko, 2016), this study revealed that environmental CSR as a significant dimension of CSR in the airline industry (Han, Al-Ansi, et al., 2020), is positively associated with CEDs. This study is unique concerning the assessment of environmental CSR in the airline industry, as previous research has been scant in the context of heavy industries, such as the airline industry with a high level of carbon footprint and negative repercussions, such as air pollution, climate change, and global warming (Hwang & Choi, 2021; Kim, Kim & Hwang, 2020). According to Sun et al. (2014), environmental activities performed by organizations usually will be ignored by customers in industries with low negative environmental impact while highlighting the significance of such initiatives in industries with high negative environmental footprints. This implies the fact that the association between environmental CSR and CEDs is of great importance in industries such as the airline industry which strongly influences the environment.

In addition, relationship equity was found as the most significant indicator of CEDs in the airline industry. According to Lemon et al. (2001), relationship equity plays a vital part in service industries, such as the airline industry, because customer loyalty and future purchase are among key success factors for such service settings. As such, it sounds plausible for airlines to establish a beneficial and profitable relationship with their customers and encourage them to use their brands by implementing environmental CSR initiatives. Indeed, establishing an improved relationship with customers could benefit companies greatly. According to Niu et al. (2016), the aviation industry in developing countries can receive financial support from their customers to promote their environmental protection activities. This is also consistent with the studies by Hao and Chon (2022), Ou and Verhoef (2017), and

Lee and Park (2019), who found that relationship equity is a key driver of customer equity in the tourism and hospitality industries.
However, this finding varies from the study of Hyun (2009) carried out in the context of chain restaurants, with brand value being the most important driver of customer equity. Such variations in findings within the extant CEDs literature underline the significance of business context and setting in determining the most important indicators of CEDs across industries (Lee & Park, 2019). Even though customer equity is receiving rising research attention in the service marketing literature (Lee & Park, 2019), less is known about the antecedents and consequences of such a phenomenon in the airline industry. More importantly, the findings demonstrate that CEDs have a positive impact on travelers' PI and fully mediate the impact of environmental CSR on travelers' PI in the airline industry.
A large number of previous studies have shown that value equity and brand equity as the drivers of customer equity has a direct impact on the customers' PI through tangible attributes (e.g., price and physical settings) and intangible aspects (e.g., brand image and relationships; Holehonnur et al., 2009; Irshad, 2012; Ashill and Sinha, 2004; Chang & Liu, 2009). However, this study postulates that relationship equity accumulated by travelers through their interactions with the airline not only has a stronger direct impact on their PI but can also enhance the impact of environmental CSR on travelers' PI. This could be due to the reason that environmental CSRlinks firms with ethical values, sustainability, and reliability (Martínez et al., 2014), which could positively influence the customers' responses to such initiatives and enhance their PI. From a cultural standpoint, it can be argued that in collectivist societies such as Iran, individuals are expected to follow the social norms and have strong cohesive relationships with other people, which indicates that better and more enhanced relationships between customers and organizations could potentially lead to a higher level of customer PI (Ruiz-Mafe et al., 2013).

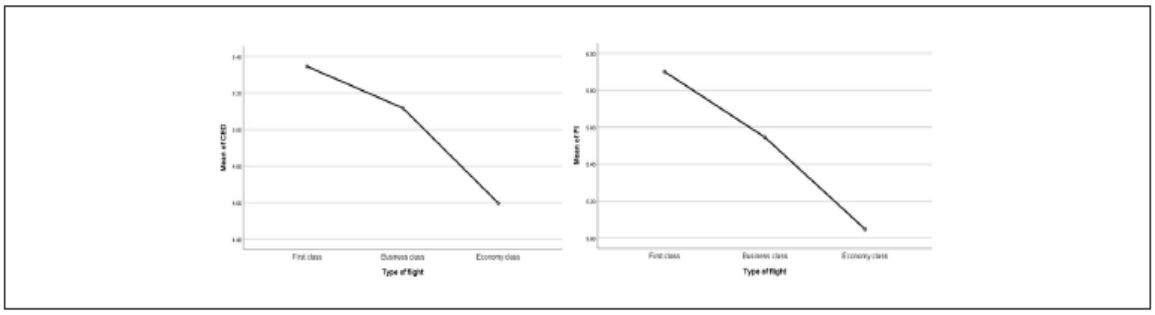

Figure 3. Tukey posthoc results.

Iran is a country with a collectivist culture and the significance of the aforementioned association can be well established. This study also examined the impact of CEDs on travelers' SB. According to Vogel et al. (2008), CEDs can significantly predict future sales, and hence, it is important to know how CEDs affect customer SB. Surprisingly and contrary to the extant literature(e.g., Jung et al., 2017; Saeed & Azmi, 2019; Vogel et al., 2008; Wu et al., 2016), the negative hypothetical relationship between CEDs and travelers' SB has been rejected by the empirical data. Generally, dissatisfied customers with low perceived quality or inflated prices (i.e., low in value equity; Fu & Hu, 2011), show a greater tendency to switch (Ou & Verhoef, 2017). Moreover, the perceived value is the core need for the firms to establish an appropriate and long-term relationship with the customers, and if customers feel

that the offered products or services do not fulfill their needs, brand and relationship equity as other drivers of customer equity cannot result in generating more revenue and profits for the firms (Lemon et al., 2001). Surprisingly, CEDs could not predict travelers' SB in the Iranian airline industry, which is an inconsistent behavior that requires further investigation. Having said that, one possible explanation for exhibiting such behavior lies in the fact that cultural and contextual factors, including uncertainty avoidance, have an influential impact on customers' SB (Saeed & Azmi, 2019; Shukla, 2009). According to Scherer et al. (2011), consumers might react differently to the same stimulus across various cultural backgrounds. More specifically, uncertainty avoidance, as Hofstede's (Hofstede et al., 2005) cultural dimension measures the level of uncertainty that members of a culture are willing to tolerate through unstructured situations. Unstructured situations are mainly surprising and vary from what is usual; hence, members of a culture with a relatively high score in uncertainty avoidance are more disposed to minimize their SB to maintain their past behavior and attitudes. In a similar vein, the mediating relationship of environmental CSR and SB through CEDs has also been rejected. A possible explanation could be that consumers' choices in poor economies are mainly driven by the price range. In addition, Paul et al. (2016) argued that customers in developed countries appear to be more concerned with environmental issues than those in developing countries.

Therefore, it could be argued that such customers, from developing countries, do not potentially include environmental concerns and considerations in their purchase behavior due to their limited environmental knowledge and financial difficulties. Such variations have also been evident in travelers' ratings of CEDs and their PI across different types of flights. It appears that the impact of environmental CSR on CEDs and PI is stronger for travellers flying first class compared to the ones who are flying economy class. These findings are consistent with the findings of Brochado et al. (2019) and have implications for airline marketing.

Theoretical Contributions

This study contributes to service marketing as well as sustainable tourism research by extending environmental CSR literature to the airline industry. Despite a few studies that have investigated CSR activities in the airline industry (Chang et al., 2015; Cowper-Smith & de Grosbois, 2011; Jing & Moon, 2021; Karaman & Akman, 2018; Kuo et al., 2016), less is known about the impact of environmental CSR on travelers' perceptions and other significant values (Han, Chua, et al., 2020; Hwang & Lyu, 2020; Lee, 2016). This study revealed that while environmental CSR predicts traveller PI through the mediation of CEDs, it fails to impact SB in the context of the Iranian air transport market. This study further advances the current knowledge appertaining the joint mediating impact of CEDs on environmental CSR and travelers' critical outcomes.

A review of extant literature revealed that CEDs have been widely tested in isolation (e.g., Sun & Ko, 2016; Sun et al., 2014; Vogel et al., 2008), and with some exceptions (e.g., Bruhn et al., 2008; Furinto et al., 2009; Kim, 2015), there is limited knowledge about the simultaneous impact of customer equity drivers on customers' behavioral outcomes. Accordingly, this study fills the gap by treating customer equity drivers as a second-order construct to advance the current knowledge regarding the joint impact of CEDs on travelers'PI and SB in the airline industry. Relationship equity is focused on firms' attempts to build a successful relationship with customers (Kim, Kim & Hwang 2020) and was found as the most salient element of CEDs.

Specifically, the results empirically supported the full mediating role of CEDs in the previously mentioned associations. In all, the results revealed that a strong mediating mechanism is needed to boost the impact of environmental CSR on travelers' PI.

Nevertheless, travelers in the Iranian air travel market may still switch to other airlines for more favorable values beyond environmental concerns. This implies that researchers capture cultural differences and investigate the mediating mechanisms that would significantly affect customer SB in environmental CSR research. In particular, this research has adapted S-O-R as a theoretical framework to understand customer behaviors. The S-O-R framework has been previously used in the service marketing literature (Peng & Kim, 2014; Luqman et al., 2017). Given the S-O-R framework (Mehrabian and Russell, 1974), the current study indicates that environmental CSR as the stimulus (S) could cause changes in customers' organismic states (O) in terms of CEDs and result in PI as the behavioural response (R). However, the S-O-R framework failed to predict SB among travelers in the context of the Iranian air travel market. Even though Nardella et al. (2020) argue that customers perceive negative emotions when they understand that the company does not invest in CSR, Louis et al. (2019) postulated that the impact of environmental CSR is contingent on the groups of consumers considered very responsible consumers and the least responsible consumers. Finally, this study advances the current understanding of airline engagement with the United Nations' Sustainable Development Goals (SDGs; Perryman et al., 2022). Through environmental CSR adaptation, airlines' attempt to invoke responsible consumption and production profiled under Goal 12 and responds to the call for climate action as Goal 13 and reduced dependency on fossil fuel as the central target of SDG 12 (Naidoo and Fisher, 2020; United Nations, 2015), and energy-efficiency initiatives as a significant contribution to Goal 7 (i.e., universal access to affordable, reliable, sustainable, and modern energy; Nurunnabi et al., 2019).

Practical Implications

A moral firm that actively uses CSR initiatives, particularly in environmentally conscious ways, has a better chance of increasing customer retention rates and building a positivereputation and attitude toward the firm. This is even more true in the airline industry (Kim, Lee, & Roh, 2020), but the firm needs a tool for forecasting and evaluating the success of their sustainable marketing activities, and customer equitycan do it efficiently (Sun & Ko, 2016). Concerning the research results, environmental CSR has been identified as a significant factor that has a positive effect on CEDs and it is shown that airline eco-friendly activities can alter consumers' behaviors and attitudes.

More important, performing environmental activities, such as reductions in fuel consumption and greenhouse gas emissions in the airline industry could influence travelers' behaviors in order to support the airlines that strive to contribute to SDGs, in terms of responsible consumption and production (Goal 12), affordable and clean energy (Goal 7), and climate action (Goal 13; United Nations, 2015). As Lee et al. (2018) suggest, firms' eco-friendly activities can be undertaken without sacrificing firms' financial performance.

Therefore, it is recommended that airline managers engage in environmental CSR practices and energy efficiency projects to respond to SDGs (Moneva et al., 2019; Nurunnabi et al., 2019). Findings also suggest that CEDs as manifested by value equity, brand equity, and relationship equity, can mediate the impact of environmental CSR activities on travelers' PI. The results initially ring the alarm for airline managers to consider the contributions of environmental CSR as positive signals of the airline's goodwill toward the environment. This would in turn facilitates consumers' identification of the firm leading to an improved level of relationship quality between customers and the firm (Aljarah et al., 2018). As such, airline managers should reinforce environmental CSR communication and set environmentally friendly actions at the corporate strategic level. Airline managers are also encouraged to invest in strategies that enhance CEDs among travelers. Specifically, relationship equity as the strongest indicator of CEDs needs further attention for an established amount of public

awareness devoted to the importance of environmental sustainability, and significant changes in individuals' lifestyles with a tendency toward environmentally friendly behavior (Han, Al-Ansi, et al., 2020).

Relationship equity enhancement can be reached by utilizing different engagement strategies, such as loyalty programs (Hao & Chon, 2022; Yoshida & Gordon, 2012). As declared by Liu and Mattila (2016), there is impressive proof to recommend that CSR programs may well be a key for firms to build brand relationships with consumers.

Appropriately, service companies have begun to compound CSR into their loyalty programs. In line with this, airline managers can work on plans that facilitate loyalty program memberships for passengers who exhibit green behaviors such as online check-in or willingness to pay for green products in their air travel. Such enhanced relationship equity enables airline managers to know their customers better, customize their offers based on customers' needs, and retain them as satisfied and loyal customers (Casais et al., 2020; Mohd Sam & Tahir, 2009). In addition, innovative products and services in form of (a) technologically driven innovations including winglets, continuous descent approach, and biofuels and (b) process-driven innovations such as CO2- offset programs, online check-in processes, and charges for checked luggage (Yan et al., 2016) can be deployed to develop perceived value equity (Sun et al., 2014).

Among various marketing facilities, social media has been a significant tool to present numerous services and products to the market. Social media affects the brand image designed by marketers and support it to be delivered online via consumers. On the contrary, it is making a reformation in the ways consumers obtain their preferred information.

Respectively, brand awareness as another component of brand equity is impacted by social media (Masa'deh et al., 2021; Seo et al., 2020). Consistently, Book et al. (2018) argued that online reviews have a great impact on the evaluations and choices of consumers. Therefore, airline managers are encouraged to leverage the potential of social media and enhance brand equity not only through environmental CSR-related interactions between the firm and customers but also by preparing a suitable context for customers to engage with the electronic word of mouth about eco-friendly attempts of the airline.

Finally, brand equity is an important competitive tool to attract and retain consumers (Hajipour et al., 2013). Loyal customers are satisfied, have trust in the brand, and are less likely to switch brands. Such customers are less expensive to retain and relatively require less marketing budget and act as strong barriers for competitors to enter the market. Therefore, airline managers are strongly recommended to enhance brand equity to affect passengers' choice of their brand, PI, and overall satisfaction with their services (de Oliveira & Caetano, 2019).

Limitations and Future Research Directions

The results of the current study should be interpreted in light of its limitations. First, the data were collected with crosssectional data that referenced the knowledge of passengers about a specific airline. Collectively, these would raise the issue of the common method variance (CMV) and memory bias. In light of Harman's one-factor test, CMV was not a statistical issue, and the memory bias was controlled with the reference to the immediate airline that the passengers tendedto fly with. However, future research is encouraged to capture the proposed associations using longitudinal data to avoid the limitations associated with the cross-sectional data.

This study used CEDs as the mediating mechanism to assess the impact of environmental CSR on passengers' critical outcomes. In future research, additional mediators such as brand love and brand identity could be used to enhance the current knowledge regarding the impact of environmental CSR on passengers' PI and SB. In light of inconsistencies found between

the results of the current study and the extant literature and in line with Godefroit-Winkel et al. (2022) regarding the differential impact of environmental CSR on customers' responses across cultures, future research is called for to assess the significance of such association in different cultural settings such as China and the United Kingdom to determine the role of culture in consumer behaviour concerning environmental CSR.
Specifically, Olya et al. (2021) found that in collectivist cultures, environmental sustainability should be followed by social and economic suitability practices to predict customer responses. Therefore, a combination of predictor variables (i.e., environmental, social, and economic CSR) should develop the current understanding of the CSR–customer response nexus in tourism sustainability literature. Furthermore, the results of the current research revealed that first-class travelers are having more favorable approachtoward environmental CSR activities of the airline and are more willing to show PI toward the perceived economically friendly airline. Such a distinction calls for more research to investigate the significant impact of environmental CSR initiatives across various segments of tourism and hospitality markets. In closing, this study was conducted in the airline industry; therefore, a replication of the study could help advance the knowledge about the associations of environmental CSR, CEDS, PI, and SB in other contexts such as hotels and restaurants.

References

Alvarado-Herrera, A., Bigne, E., Aldas-Manzano, J., & Curras- Perez, R. (2017). A scale for measuring consumer perceptionsof corporate social responsibility following the sustainable development paradigm. *Journal of Business Ethics*, 140(2), 243–262.
Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411. ATAG. (2020). Air transport action group. *Facts & Figures*.
Retrieved January 4, 2022, from https://www.atag.org/factsfigures. html
Ashill, N. J., & Sinha, A. (2004). An exploratory study into the impact of components of brand equity and country of origin effects on purchase intention. *Journal of Asia-Pacific Business*, 5(3), 27–43.
Azjen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Prentice-Hall.
Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16, 74–94.
Bansal, H. S., & Taylor, S. F. (1999). The service provider switching model (spsm) a model of consumer switching behavior in the services industry. *Journal of Service Research*, 2(2), 200–218.
Blattberg, R. C., & Deighton, J. (1996). Manage marketing by the customer equity test. *Harvard Business Review*, 74(4), 136.
Book, L. A., Tanford, S., Montgomery, R., & Love, C. (2018). Online traveler reviews as social influence: Price is no longer king. *Journal of Hospitality & Tourism Research*, 42(3), 445–475.
Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216.
Brochado, A., Rita, P., Oliveira, C., & Oliveira, F. (2019). Airline passengers' perceptions of service quality: Themes in online reviews. *International Journal of Contemporary Hospitality Management*, 31(2), 855–873.
Bruhn, M., Georgi, D., & Hadwich, K. (2008). Customer equity management as formative second-order construct. *Journal of Business Research*, 61(12), 1292–1301.

Casais, B., Fernandes, J., & Sarmento, M. (2020). Tourism innovation through relationship marketing and value co-creation: A study on peer-to-peer online platforms for sharing accommodation. *Journal of Hospitality and Tourism Management*, 42, 51–57.
Chang, D.-S., Chen, S.-H., Hsu, C.-W., & Hu, A. H. (2015). Identifying strategic factors of the implantation CSR in the airline industry: The case of Asia-Pacific airlines. *Sustainability*, 7(6), 7762–7783.
Chang, H. H., & Liu, Y. M. (2009). The impact of brand equity on brand preference and purchase intentions in the service industries. *The Service Industries Journal*, 29(12), 1687–1706.
Chen, C.-F., & Chang, Y.-Y. (2008). Airline brand equity, brand preference, and purchase intentions—The moderating effects of switching costs. *Journal of Air Transport Management*, 14(1), 40–42.
Chomvilailuk, R., & Butcher, K. (2021). Enhancing hotel guest corporate social responsibility–advocacy behaviors through hedonic benefits. *Journal of Hospitality & Tourism Research*, 47(2), 375–394. https://doi.org/10.1177/10963480211017196
Christis, J., & Wang, Y. (2021). Communicating environmental CSR towards consumers: The impact of message content, message style and praise tactics. *Sustainability*, 13(7), 3981.
Chuah, S., El-Manstrly, D., Tseng, M.-L., & Ramayah, T. (2020). Sustaining customer engagement behavior through corporate social responsibility: The roles of environmental concern and green trust. *Journal of Cleaner Production*, 262, 121348. https://doi.org/10.1016/j.jclepro.2020.121348
Cowper-Smith, A., & de Grosbois, D. (2011). The adoption of corporate social responsibility practices in the airline industry. *Journal of Sustainable Tourism*, 19(1), 59–77.
D'Acunto, D., Tuan, A., Dalli, D., Viglia, G., & Okumus, F. (2020). Do consumers care about CSR in their online reviews? An empirical analysis. *International Journal of Hospitality Management*, 85, 102342. https://doi.org/10.1016/j. ijhm.2019.102342
de Oliveira, D. S., & Caetano, M. (2019). Market strategy development and innovation to strengthen consumer-based equity: The case of Brazilian airlines. *Journal of Air Transport Management*, 75, 103–110.
De Roeck, K., & Delobbe, N. (2012). Do environmental CSR initiatives serve organizations' legitimacy in the oil industry? Exploring employees' reactions through organizational identification theory. *Journal of Business Ethics*, 110(4), 397–412.
Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307–319.
Eid, R., Agag, G., & Shehawy, Y. M. (2021). Understanding guests' intention to visit green hotels. *Journal of Hospitality &Tourism Research*, 45(3), 494–528.
Fishbein, M., & Ajzen, I. (1977). Belief, attitude, intention, and behavior: An introduction to theory and research. *Philosophy and Rhetoric*, 10(2), 130–132.
Flammer, C. (2013). Corporate social responsibility and shareholder reaction: The environmental awareness of investors. *Academy of Management Journal*, 56(3), 758–781.
Font, X., & McCabe, S. (2017). Sustainability and marketing in tourism: Its contexts, paradoxes, approaches, challenges and potential. *Journal of Sustainable Tourism*, 25(7), 869–883. https://doi.org/10.1080/09669582.2017.1301721
Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, 69, 3192–3198.

Furinto, A., Pawitra, T., & Balqiah, T. E. (2009). Designing competitive loyalty programs: How types of program affect customer equity. *Journal of Targeting, Measurement and Analysis for Marketing*, 17(4), 307–319.
Gao, L., Melero-Polo, I., & Sese, F. J. (2020). Customer equity drivers, customer experience quality, and customer profitability in banking services: The moderating role of social influence. *Journal of Service Research*, 23(2), 174–193.
Garriga, E. (2014). Beyond stakeholder utility function: Stakeholder capability in the value creation process. *Journal of Business Ethics*, 120(4), 489–507.
Ghaderi, Z., Mirzapour, M., Henderson, J. C., & Richardson, S. (2019). Corporate social responsibility and hotel performance: A view from Tehran, Iran. *Tourism Management Perspectives*, 29, 41–47.
Godefroit-Winkel, D., Schill, M., & Diop-Sall, F. (2022). Does environmental corporate social responsibility increase consumer loyalty? *International Journal of Retail & Distribution Management*, 50(4), 417–436.
Grimmer, M., & Bingham, T. (2013). Company environmental performance and consumer purchase intentions. *Journal of Business Research*, 66(10), 1945–1953.
Habitzreuter, A. M., & Koenigstorfer, J. (2021). The impact of environmental CSR-linked sport sponsorship on attitude toward the sponsor depending on regulatory fit. *Journal of Business Research*, 124, 720–730.
Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson Education International.
Hajipour, B., Bavarsad, B., & Zarei, S. E. (2013). Effect of marketing factors on brand relationship equity and affects the customers' purchase intention. *Journal of Management Research*, 5(1), 317.
Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: A review of theories, concepts, and latest research. *Journal of Sustainable Tourism,* 29(7), 1021–1042.
Han, H., Al-Ansi, A., Chi, X., Baek, H., & Lee, K.-S. (2020). Impact of environmental CSR, service quality, emotional attachment, and price perception on word-of-mouth for fullservice airlines. *Sustainability*, 12(10), 3974.
Han, H., Chi, X., Kim, C.-S., & Ryu, H. B. (2020). Activators of airline customers' sense of moral obligation to engage in prosocial behaviors: Impact of CSR in the Korean marketplace. *Sustainability*, 12(10), 4334.
Han, H., Chua, B. L., Ariza-Montes, A., & Untaru, E. N. (2020). Effect of environmental corporate social responsibility on green attitude and norm activation process for sustainable consumption: Airline versus restaurant. *Corporate Social Responsibility and Environmental Management*, 27(4), 1851–1864.
Han, H., Kim, W., & Hyun, S. S. (2011). Switching intention model development: Role of service performances, customer satisfaction, and switching barriers in the hotel industry. *International Journal of Hospitality Management*, 30(3), 619–629.
Han, H., Shim, C., Lee, W. S., & Kim, W. (2019). Product performance and its role in airline image generation and customer retention processes: Gender difference. *Journal of Travel & Tourism Marketing*, 36(4), 536–548.
Han, H., & Yoon, H. J. (2015). Hotel customers' environmentally responsible behavioral intention: Impact of key constructs on decision in green consumerism. *International Journal of Hospitality Management*, 45, 22–33.
Han, H., Yu, J., & Kim, W. (2019a). Environmental corporate social responsibility and the strategy to boost the airline's image and customer loyalty intentions. *Journal of Travel & Tourism Marketing*, 36(3), 371–383.

Hao, F., & Chon, K. K.-S. (2022). Contactless service in hospitality: Bridging customer equity, experience, delight, satisfaction, and trust. *International Journal of Contemporary Hospitality Management*, 34(1): 113–134.
Ho, M. H. W., & Chung, H. F. (2020). Customer engagement, customer equity and repurchase intention in mobile apps. *Journal of Business Research*, 121, 13–21.
Hofstede, G., Hofstede, G. J., & Minkov, M. (2005). *Cultures andorganizations: Software of the mind* (Vol. 2).
Mcgraw-Hill. Holehonnur, A., Raymond, M. A., Hopkins, C. D., & Fine, A. C. (2009). Examining the customer equity framework from a consumer perspective. *Journal of Brand Management*, 17(3),165–180.
Hu, B., Fu, Y., & Wang, Y. (2011). An empirical study on the dimensions of consumer perceived value in green hotels. In
2011 International Conference on Management and Service Science, 1–4, IEEE.
Hussain, S., Seet, P. S., Ryan, M., Iranmanesh, M., Cripps, H., & Salam, A. (2022). Determinants of switching intention in the electricity markets - An integrated structural model approach. *Journal of Retailing and Consumer Services*, 69, 103094.
Hwang, J., & Choi, J. K. (2021). Understanding environmentally friendly airline travelers' internal environmental locus of control and its consequences. *Research in Transportation Business & Management*, 41, 100612.
Hwang, J., & Hyun, S. S. (2017). First-class airline travelers' tendency to seek uniqueness: How does it influence their purchase of expensive tickets? *Journal of Travel & Tourism Marketing*, 34(7), 935–947.
Hwang, J., & Lyu, S. O. (2020). Relationships among green image, consumer attitudes, desire, and customer citizenship behaviour in the airline industry. *International Journal of Sustainable Transportation*, 14(6), 437–447.
Hyun, S. S. (2009). Creating a model of customer equity for chain restaurant brand formation. *International Journal of Hospitality Management*, 28(4), 529–539.
IATA annual report (2021). https://www.iata.org/contentassets/
c81222d96c9a4e0bb4ff6ced0126f0bb/iata-annualreview- 2021.pdf, retrieved on 16/02/2023.
IATA annual report (2022). https://www.iata.org/contentassets/
c81222d96c9a4e0bb4ff6ced0126f0bb/annual-review-2022. pdf, retrieved on 16/02/2023.
Irshad, W. (2012). Service based brand equity, measure of purchase intention, mediating role of brand performance. *Academy of Contemporary Research Journal*, 1(1), 1–10.
Islam, T., Ali, G., & Asad, H. (2018). Environmental CSR and proenvironmental behaviors to reduce environmental dilapidation: The moderating role of empathy. *Management Research Review*, 42(3), 332–351. https://doi.org/10.1108/MRR-12- 2017-0408.
Jang, Y. J. (2022). The role of stakeholder engagement in environmental sustainability: A moderation analysis of chain affiliation. *Journal of Hospitality & Tourism Research*, 46(5), 1006–1026.
Jeon, M. M., Lee, S., & Jeong, M. (2020). Perceived corporate social responsibility and customers' behaviors in the ridesharing service industry. *International Journal of Hospitality Management*, 84, 102341.
Jing, L., & Moon, J. (2021). Airline chief executive officer and corporate social responsibility. *Sustainability*, 13(15), 8599.
Johnson, R. E., Rosen, C. C., & Djurdjevic, E. (2011). Assessing the impact of common method variance on higher order multidimensional constructs. *Journal of Applied Psychology*, 96(4), 744.
Jung, J., Han, H., & Oh, M. (2017). Travelers' switching behaviour in the airline industry from the perspective of the push-pullmooring framework. *Tourism Management*, 59, 139–153.

Karaman, A. S., & Akman, E. (2018). Taking-off corporate social responsibility programs: An AHP application in airline industry. *Journal of Air Transport Management*, 68, 187–197.
Kassinis, G., & Vafeas, N. (2006). Stakeholder pressures and environmental performance. *Academy of Management Journal*, 49(1), 145–159.
Kazmi, S. H. A., Shahbaz, M. S., Mubarik, M. S., & Ahmed, J. (2021). Switching behaviors toward green brands: Evidence from emerging economy. *Environment, Development and Sustainability*, 23(8), 11357–11381.
Keaveney, S. M. (1995). Customer switching behavior in service industries: An exploratory study. *Journal of Marketing*, 59(2), 71–82.
Kim, J. (2015). Sustainability in social brand communities: Influences on customer equity. *Journal of Global Scholars of Marketing Science*, 25(3), 246–258.
Kim, W., Kim, H., & Hwang, J. (2020). Sustainable growth for the self-employed in the retail industry based on customer equity, customer satisfaction, and loyalty. *Journal of Retailing andConsumer Services*, 53, 101963.
Kim, Y., Lee, S. S., & Roh, T. (2020). Taking another look at airline CSR: How required CSR and desired CSR affect customer loyalty in the airline industry. *Sustainability*, 12(10), 4281.
Kumar, A., A, A., & Gupta, H. (2020). Evaluating green performance of the airports using hybrid BWM and VIKOR methodology. *Tourism Management*, 76, 103941. https://doi.org/10.1016/j.tourman.2019.06.016
Kuo, T. C., Kremer, G. E. O., Phuong, N. T., & Hsu, C.-W. (2016). Motivations and barriers for corporate social responsibility reporting: Evidence from the airline industry. *Journal of Air Transport Management*, 57, 184–195.
Lee, B. Y., & Park, S. Y. (2019). The role of customer delight and customer equity for loyalty in upscale hotels. *Journal of Hospitality and Tourism Management*, 39, 175–184.
Lee, E.-J. (2016). Empathy can increase customer equity related to pro-social brands. *Journal of Business Research*, 69(9), 3748–3754.
Lee, S., Kim, B., & Ham, S. (2018). Strategic CSR for airlines: Does materiality matter? *International Journal of Contemporary Hospitality Management*, 30(12), 3592–3608. https://doi. org/10.1108/ijchm-10-2017-0697
Lemon, K. N., Rust, R. T., & Zeithaml, V. A. (2001). What drives customer equity? *Marketing Management*, 10(1), 20–25.
Li, J. Y., Overton, H., & Bhalla, N. (2020). Communicative action and supportive behaviors for environmental CSR practices: An attitude-based segmentation approach. *Corporate Communications: An International Journal*, 25(2), 171–186.
Liao, J., & Wang, L. (2009). Face as a mediator of the relationship between material value and brand consciousness. *Psychology & Marketing*, 26(11), 987–1001.
Liere, K. D. V., & Dunlap, R. E. (1980). The social bases of environmental concern: A review of hypotheses, explanations and empirical evidence. *Public Opinion Quarterly*, 44(2), 181–197.
Liu, S. Q., & Mattila, A. S. (2016). The influence of a "green" loyalty program on service encounter satisfaction. *Journal of Services Marketing*, 30(6), 576–585.
Louis, D., Lombart, C., & Durif, F. (2019). Impact of a retailer's CSR activities on consumers' loyalty. *International Journal of Retail & Distribution Management*, 47(8), 793–816.
Luqman, A., Cao, X., Ali, A., Masood, A., & Yu, L. (2017). Empirical investigation of Facebook discontinues usage intentions based on SOR paradigm. *Computers in Human Behavior*, 70, 544–555.

Majeed, M., Owusu-Ansah, M., & Ashmond, A. A. (2021). The influence of social media on purchase intention: The mediatingrole of brand equity. *Cogent Business & Management*, 8(1), 1944008.
Martínez, P., Pérez, A., & Del Bosque, I. R. (2014). CSR influence on hotel brand image and loyalty. *Academia Revista Latinoamericana de Administración*, 27(2), 267–283.
Masa'deh, R., AL-Haddad, S., Al Abed, D., Khalil, H., AlMomani, L., & Khirfan, T. (2021). The impact of social media activities on brand equity. *Information*, 12(11), 477.
Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. The MIT Press.
Minkov, M., & Hofstede, G. (2012). Hofstede's fifth dimension: New evidence from the World Values Survey. *Journal of Cross-Cultural Psychology*, 43(1), 3–14.
Modica, P. D., Altinay, L., Farmaki, A., Gursoy, D., & Zenga, M. (2020). Consumer perceptions towards sustainable supply chain practices in the hospitality industry. *Current Issues in Tourism*, 23(3), 358–375.
Mohd Sam, M. F., & Tahir, M. N. H. (2009). Website quality and consumer online purchase intention of air ticket. *International Journal of Basic & Applied Sciences*, 9(10), 4–9.
Moise, M. S., Gil-Saura, I., Šerić, M., & Ruiz Molina, M. E. (2019). Influence of environmental practices on brand equity, satisfaction and word of mouth. *Journal of Brand Management*, 26(6), 646–657.
Moneva, J. M., Bonilla-Priego, M. J., & Ortas, E. (2019). Corporate social responsibility and organisational performance in the tourism sector. *Journal of Sustainable Tourism*, 28(6), 853– 872. https://doi.org/10.1080/09669582.2019.1707838
Murshed, F., Sen, S., Savitskie, K., & Xu, H. (2021). CSR and job satisfaction: Role of CSR importance to employee and procedural justice. *Journal of Marketing Theory and Practice*, 29(4), 518–533.
Naidoo, R., & Fisher, B. (2020). Sustainable development goals: Pandemic reset. *Nature*, 583, 198–201.
Nardella, G., Brammer, S., & Surdu, I. (2020). Shame on who? The effects of corporate irresponsibility and social performance on organizational reputation. *British Journal of Management*, 31(1), 5–23.
Nimri, R., Patiar, A., Kensbock, S., & Jin, X. (2020). Consumers' intention to stay in green hotels in Australia: Theorization and implications. *Journal of Hospitality & Tourism Research*, 44(1), 149–168.
Niu, S.-Y., Liu, C.-L., Chang, C.-C., & Ye, K.-D. (2016). What are passenger perspectives regarding airlines' environmental protection? An empirical investigation in Taiwan. *Journal of Air Transport Management*, 55, 84–91.
Nurunnabi, M., Esquer, J., Munguia, N., Zepeda, D., Perez, R., & Velazquez, L. (2019). Reaching the sustainable development goals 2030: Energy efficiency as an approach to corporate social responsibility (CSR). *GeoJournal*, 85(2), 363– 374. https://doi.org/10.1007/s10708-018-09965-x
Olya, H., Altinay, L., Farmaki, A., Kenebayeva, A., & Gursoy, D. (2021). Hotels' sustainability practices and guests' familiarity, attitudes and behaviours. *Journal of Sustainable Tourism*, 29(7), 1063–1081.
Ortegón-Cortázar, L., & Royo-Vela, M. (2019). Nature in malls: Effects of a natural environment on the cognitive image, emotional response, and behaviors of visitors. *European Research on Management and Business Economics*, 25(1), 38–47.
Ou, J., Wong, I. A., Prentice, C., & Liu, M. T. (2020). Customer engagement and its outcomes: The cross-level effect of service environment and brand equity. *Journal of Hospitality & Tourism Research*, 44(2), 377–402.

Ou, Y.-C., & Verhoef, P. C. (2017). The impact of positive and negative emotions on loyalty intentions and their interactions with customer equity drivers. *Journal of Business Research*, 80, 106–115.
Peng, C., & Kim, Y. G. (2014). Application of the stimuli-organism- response (SOR) framework to online shopping behavior. *Journal of Internet Commerce*, 13(3-4), 159–176.
Papatheodorou, A. (2021). A review of research into air transport and tourism: Launching the Annals of Tourism Research
Curated Collection on air transport and tourism. *Annals of Tourism Research*, 87, 103151.
Park, E. (2019). Corporate social responsibility as a determinant of corporate reputation in the airline industry. *Journal of Retailing and Consumer Services*, 47, 215–221.
Park, E., Kwon, S. J., & Kim, K. J. (2016). Assessing the effects of corporate sustainable management on customer satisfaction. *Sustainable Development*, 24(1), 41–52.
Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123–134.
Perryman, M., Besco, L., Suleiman, C., & Lucato, L. (2022). Ready for take off: Airline engagement with the United Nations Sustainable Development Goals. *Journal of Air Transport Management*, 103, 102246.
Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
Prasad, M., Mishra, T., & Bapat, V. (2019). Corporate social responsibility and environmental sustainability: Evidence from India using energy intensity as an indicator of environmental sustainability. *IIMB Management Review*, 31(4), 374–384.
Ramesh, K., Saha, R., Goswami, S., & Dahiya, R. (2019). Consumer's response to CSR activities: Mediating role of brand image and brand attitude. *Corporate Social Responsibility and Environmental Management*, 26(2), 377–387.
Rhou, Y., & Singal, M. (2020). A review of the business case for CSR in the hospitality industry. *International Journal of Hospitality Management*, 84, 102330.
Ruiz-Mafe, C., Sanz-Blas, S., Hernandez-Ortega, B., & Brethouwer, M. (2013). Key drivers of consumer purchase of airline tickets: A cross-cultural analysis. *Journal of Air Transport Management*, 27, 11–14.
Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: Using customer equity to focus marketing strategy. *Journal of Marketing*, 68(1), 109–127.
Rylander, R. G., Propst, D. B., & McMurtry, T. R. (1995). Nonresponse and recall biases in a survey of traveler spending. *Journal of Travel Research*, 33(4), 39–45.
Saeed, M., & Azmi, I. B. A. G. (2019). The nexus between customer equity and brand switching behaviour of millennial Muslim consumers. *South Asian Journal of Business Studies*, 8(1), 62–80.
Scherer, K. R., Clark-Polner, E., & Mortillaro, M. (2011). In the eye of the beholder? Universality and cultural specificity in the expression and perception of emotion. *International Journal of Psychology*, 46(6), 401–435.
Schill, M., & Godefroit-Winkel, D. (2022). Consumer responses to environmental corporate social responsibility and luxury. *Journal of Services Marketing*, 36(6), 769–780.
Seo, E. J., Park, J.-W., & Choi, Y. J. (2020). The effect of social media usage characteristics on e-WOM, trust, and brand equity: Focusing on users of airline social media. *Sustainability*, 12(4), 1691.
Sezgen, E., Mason, K. J., & Mayer, R. (2019). Voice of airline passenger: A text mining approach to understand customer satisfaction. *Journal of Air Transport Management*, 77, 65–74.

Shukla, P. (2009). Impact of contextual factors, brand loyalty and brand switching on purchase decisions. *Journal of Consumer Marketing*, 26(5), 348–357.
Singh, B. (2021). Predicting airline passengers' loyalty using artificial neural network theory. *Journal of Air Transport Management*, 94, 102080.
So, K. K. F., & Li, X. (2020). Customer engagement in hospitality and tourism services. *Journal of Hospitality & Tourism Research*, 44(2), 171–177.
Sun, Y., Garrett, T. C., Phau, I., & Zheng, B. (2020). Case-based models of customer-perceived sustainable marketing and its effect on perceived customer equity. *Journal of Business Research*, 117, 615–622.
Sun, Y., Kim, K. H., & Kim, J. (2014). Examining relationships among sustainable orientation, perceived sustainable marketing performance, and customer equity in fast fashion industry. *Journal of Global Fashion Marketing*, 5(1), 74–86.
Sun, Y., & Ko, E. (2016). Influence of sustainable marketing activities on customer equity. *Journal of Global Scholars of Marketing Science,* 26(3), 270–283.
Tiamiyu, T., Quoquab, F., & Mohammad, J. (2020). To switch or not to switch: the role of tourists' psychological engagement in the context of Airbnb Malaysia. *International Journal of Tourism Cities*, 6(1), 175–196.
United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.
Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68, 1–17.
Vargo, S. L., & Lusch, R. F. (2017). Service-dominant logic 2025. *International Journal of Research in Marketing*, 34(1), 46–67.
Vieira, V. A. (2013). Antecedents and consequences of perceived value: A meta-analytical perspective. *Journal of Customer Behaviour,* 12(2–3), 111–133.
Vogel, V., Evanschitzky, H., & Ramaseshan, B. (2008). Customer equity drivers and future sales. *Journal of Marketing*, 72(6), 98–108.
Wang, H., Liu, H., Kim, S. J., & Kim, K. H. (2019). Sustainable fashion index model and its implication. *Journal of Business Research*, 99, 430–437.
Wong, I. A., Ruan, W. J., Cai, X., & Huang, G. I. (2021). Green- Induced tourist equity: The cross-level effect of regional environmental performance. *Journal of Sustainable Tourism*, 29(7), 1043–1062.
Wu, H.-C., Ai, C.-H., & Cheng, C.-C. (2016). Synthesizing the effects of green experiential quality, green equity, green image and green experiential satisfaction on green switching intention. *International Journal of Contemporary Hospitality Management*, 28(9), 2080–2107.
Wu, H.-C., Cheng, C.-C., & Ai, C.-H. (2018). An empirical analysis of green switching intentions in the airline industry. *Journal of Environmental Planning and Management*, 61(8), 1438–1468.
Xiong, C., Khan, A., Bibi, S., Hayat, H., & Jiang, S. (2022). Tourism subindustry level environmental impacts in the US. *Current Issues in Tourism*, 1–19.
Yan, W., Cui, Z., & Gil, M. J. Á. (2016). Assessing the impact of environmental innovation in the airline industry: An empirical study of emerging market economies. *Environmental Innovation and Societal Transitions*, 21, 80–94.
Yoo, C., Park, J., & MacInnis, D. J. (1998). Effects of store characteristics and in-store emotional experiences on store attitude. *Journal of Business Research*, 42(3), 253–263.
Yoshida, M., & Gordon, B. (2012). Who is more influenced by customer equity drivers? A moderator analysis in a professional soccer context. *Sport Management Review,* 15(4), 389–403.

Zhang, K. Z., Lee, M. K., Cheung, C. M., & Chen, H. (2009). Understanding the role of gender in bloggers' switching behavior. *Decision Support Systems*, 47(4), 540–546.
Zhuang, W., Luo, X., & Riaz, M. U. (2021). On the factors influencing green purchase intention: A meta-analysis approach. *Frontiers in Psychology*, 12, 644020.

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