INVESTIGATING SUSTAINABILITY PRACTICES IN STAR-RATED HOTELS AND CUSTOMER CITIZENSHIP BEHAVIOR: EMPIRICAL INSIGHTS FROM SUB-SAHARAN AFRICA

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ABSTRACT

Even though scholars have examined the performance effects of hotel sustainability practices, a call to further examined an all-encompassing hotel sustainability framework, and how individual elements of the framework impact on customer citizenship behavior has received a dearth of research. The purpose of this paper is to fill these gaps in the literature. Using a quantitative approach, a total of 358 valid responses were received from hotel customers. Structural equation modeling was used for data analysis. Out of the six examined hypotheses, four namely air and noise quality management, energy sustainability practices and waste management practices were sufficient in predicting customer citizenship behavior, whereas food sustainability practices and water conservation practices have no significant effect on customer citizenship behavior. Sustainability practices and customer citizenship behavior measures focused on customer experience without including perceptions of management. More prominently, this study examines the influence of different elements of hotel sustainability practices to customer citizenship behavior.

Originality/value – This research is one of the few attempts to examine a comprehensive framework of hotel sustainability practices and customer citizenship behavior in an emerging country context. Therefore, the study offers useful insights into how hotel sustainability practices influence customer citizenship behavior.

Keywords: Sustainability, Hotel, Waste management, Air quality management, Noise management, Water conservation, Energy conservation, Water conservation, Customer citizenship behavior.

INTRODUCTION

In every competitive business environment where firm sustainability and profitability are paramount, value to the customer is always at the focal point of strategic marketing decisions (Malone etal., 2018). Value creation to ensure service quality needs customer participation and partnership in a firm's service delivery process (Payne et al., 2017). In line with this, service firms are paying considerable attention to customer citizenship behavior (CCB) for value co-creation, which is described as helpful, discretionary behaviors of customers that support the ability of the firm to deliver service quality (Gong & Yi, 2021). In fact, scholars argue that CCB is a form of customer value creation behavior which focuses on the extra-role behavior by way of supporting service employees or other customers, provide constructive ideas and suggestions to the service firm performance. As a strategic imperative, the call to unearth and understand the factor(s) influencing customers to be value co-creators

in service delivery through CCB have been made see (Balaji, 2014; Van Tonder, & De Beer, 2018; Hossain et al., 2020).

It is enthralling to note that the need for further studies to explore the factors contributing to CCB in the service delivery process have been answered by marketing scholars (Jung and Yoo, 2017). Quite profoundly, these past studies confirmed that CCB gives an organization a competitive advantage through enhanced relationships among participants in the service encounter. It is also clear from these studies that CCB adds value to customers by increasing their sense of belonging and usefulness, relieving them of friends and relatives or other responsibilities, facilitating social interaction by assisting and meeting other customers, treating employees with respect, and assisting staff and consumers without expecting any direct reward. Despite its importance to service firms, scholars such as Hur, Kim and Kim (2018), have been emphatic that examining sustainability marketing practices as its possible trigger in the hotel industry will be a valuable addition to the strategic marketing literature.

Globally, environmental challenges such as global warming and air, noise and water pollution have become topical issues of concern, leading to increased efforts to safeguard the environment and nature. Interestingly, hotels are one of the entities whose operation have dire consequences on local communities and the environment hence requiring them to align their practices to sustainability principles (Kim, Barber & Kim, 2019). In fact, owing to increased consumer awareness, sustainability practices of hotels could be such an important factor influencing CCB (Gong & Yi 2021). CCB of a hotel guest may include providing a front desk executive with a suggestion, recommendations after check-in, restaurant service, lobby experience, check-out etc. (Wu & Liang, 2009; Hossain et al., 2020). Notwithstanding the importance of sustainability practices, no wide-ranging empirical studies have examined its impact on CCB in the hotel industry to date. Hence, this study seeks to address this gap within the context of star-rated hotels.

In addition to this lacuna, the portmanteau of sustainability practices in the hotel industry that has the impetus to influence consumer behavior remains a burning topical issue among academics (Taoketao et al., 2018; Kim & Hall, 2020). Aside the fact that values and environmental issues are important factors inducing consumer behavior in the context of sustainable hotel practices (Chen, 2015; Assaker, O'Connor & El-Haddad, 2020), there is surprisingly limited theoretically integrated research on the role of these determinants of hotel CCB. To fill this gap, this study seeks to build and test a conceptually comprehensive model to identify whether sustainable practices of water conservation management, food quality management, energy saving, waste management and reduction, air quality management and noise management influence hotel guest to engage in CCB with respect to voluntarily helping other customers and show patience in case of service failure. To emphasize, Kim, Barber and Kim (2019) and TM et al. (2021), for example, duly provide systematic reviews on the need for a comprehensive hotel sustainability framework. Therefore, a study like this is particularly germane.

With sustainable practices being relatively a new concept in emerging economies (Oriade et al., 2021), this study makes tremendous theoretical and empirical contributions to the literature by presenting an integrated framework that measures consumer response in terms of CCB to hotel sustainability practices is presented. This paper adopts social exchange theory to the nexus. The rest of the paper is organized as follows. First, the next section discusses the theoretical context and literature review, the research model and hypotheses for the study. The methodology for the study also follows, along with study results, analyses and discussions of findings. The paper concludes with some implications for theory and practice, as well as provides some avenues for future research.

THEORETICAL SETTING AND HYPOTHESIS DEVELOPMENT

Theoretical Context

Informed by the social exchange theory (SET), the conceptual model of the study showing the hypothesized relationships are constructed. The authors believe that SET is particularly relevant to this study. This theory has been used extensively by past researchers to explain consumer behavior see (Balaji, 2014; Tung, Chen & Schuckert, 2017; Assiouras et al., 2019). Scholars such as Kumar and Rahman (2013) have established that sustainability practices are a strategic relationship marketing tool. From this background, the SET argues that customers will feel obligated to return favors when they have benefited from others or organizations (Payne & Webber, 2006; Xie et al., 2014). The benefits herein are sustainability marketing practices meant to save mankind by way of ensuring clean air and water, reducing chemical and noise pollution and slow floodwaters. To mankind, sustainability practices are more than simply "a good thing to do."

In effect, the premise of the theory is that all relationships constitute a 'give and take' and so social exchange actions are contingent on the rewarding reactions of others. Over time, the 'give and take' (reciprocity) leads to mutually and rewarding transactions and relationships (Cropanzano & Mitchell, 2005). It also means that the significant value one party received in an exchange relationship creates obligation for the other party to reciprocate (Bagger & Li, 2011). Accordingly, applying the SET to the frame of sustainable practices in hotels, it is conceivable to anticipate that consumers will have a sense of obligation in the form of extra-role behaviors by way of CCB. In other words, when hotels invest in sustainability practices, SET dictate that customers reciprocate, and citizenship behavior is an avenue for reciprocation.

Sustainability

The concept of sustainability was brought to fore in the 70s by virtue of a conference organized by the United Nations on the Human Environment also known as 'Our Common Future' claiming that proactive measures are urgently needed to address global environmental problems (Du Pisani, 2006). Immediately after the conference, the term 'sustainable development' became a buzzword. Sustainable development, according to the Brundtland report published by the World Commission on Environment and Development [WCED] (1987), is defined as "development that meets current demands without jeopardizing future generations' ability to satisfy their needs". It is also defined as managing the well-being of the environment, people, economy and/or society over a long period.

Notwithstanding the myriad of definitions, the concept needs further clarity (Hopwood, Mellor & O'Brien, 2005). To address this, experts, scholars and practitioners were drawn from five continents with the aim that the global community is required to achieve sustainable development in three ways: social, economic and environmental. This thus implies that, sustainability encompasses ethical values and principles through the promotion of responsible activities that include environmental, societal, and economic goals to take a long-term view of the future.

Consumer Citizenship Behavior (CCB)

The concept CCB emerged due to the important role of positive customer functions (Yi & Gong, 2006). According to CCB is defined as "voluntary and discretionary behavior by individual customers that is not directly or explicitly expected or rewarded, but that aggregates into higher service quality and promotes the effective functioning of service

organizations i.e., helping another customer or providing suggestions to the service organization". As its main building block, Gong and Yi (2021) posit that the voluntary and discretionary conducts are mainly manifested through (1) making recommendation of the service of the service firm to friends and family members, (2) providing unsolicited feedback and information to the organization so as to improve its delivery process, (3) helping other customers in organizational-related tasks or to enjoy the service, (4) displays of relationship affiliation through communication with other customers about their relationship with an organization, through tangible displays on their person or their personal items. Furthermore, (5) participation in the firm's activities by way of being at events organized by the firm and engaging in activities championed by the firm such as marketing research, (6) benevolent acts of service facilitation exhibited through tolerance, patience and politeness during the service delivery process and finally (7) flexibility by being willing to adapt to events beyond the firm's control.

Relevance of SET in the Context of Sustainable Hotel Practices and CCB

The global hotel industry is one of the businesses that are chastised for causing various threats to the natural environment due to its reliance on natural resources for business sustainability. As noted by Kasim (2009), hotels, especially star-rated ones consume enormous amount of water, energy and non-durable goods and discharge huge amounts of raw and solid waste in various quantities. With human climate change being the greatest threat to human wellbeing and health of the planet (Perera, 2017), many forces and institutions have been calling on hotels to be environmentally friendly through the implementation innovative sustainable practices to secure our future (Du Pisani, 2006). More importantly, consumers growing concern about environmental sustainability has incited hoteliers to integrate sustainability into their fold as a competitive strategy (Martínez, 2015). Through a literature review process, six cardinal hotel sustainability practices of water consumption reduction, saving energy, waste management, noise management, air quality management and food management have been identified as having the propensity to drive CCB.

Applying the SET in this context, it is plausible to expect hotel customers to have a sense of duty in the form of extra-role behaviors only because hotel sustainability minded. When a business engages in sustainability practices, shared value is created and guests who receive high value from hotel experience simply return the "favor" or sustain these "rewarding transactions and relationships" with the hospitality service provider (Growth, 2005), demonstrating a higher level of CCB. Extant literature on sustainability practices of hotels maintains that customers tern to pay back by providing positive feedback, engage in repeat visitation, and increase advocacy through word-of-mouth and personal recommendation (Manaktola & Jauhari, 2007). Anchored on the SET, the hypotheses relationship of the study's main constructs is argued below.

Reducing water consumption: Water conservation management is a sustainable practice and is defined by Manaktola and Jauhari, (2007) as a strategy to reduce the quantity of water needed in running a hotel as well as engage in treatment and reuse of rain and wastewater. Hotels depend on huge amounts of water on daily basis and some of these waters are extracted from streams, rain, and earth. Conservation management requires the installation of water-efficient devices and gadgets such as low-flow toilets, showerheads, and infrared-activated faucets (Bohdanowicz, 2005). Additionally, towel or bed linen reuse programs, watering grass and plants early in the morning and at midnight to limit evaporation, and recycling the grey water are water conservation management strategies (Han et al., 2018). Thus, the reciprocity of SET could be expressed through CCB. In fact, scholars

like Manaktola and Jauhari (2007), and Han, et al. (2011) found that water conservation management has a significant impact on guest's ability to willingly engage in CCB. Considering this, the following is hypothesized.

H_{01}:   *Water conservation management of hotel sustainable practices positively and significantly influences CCB.*

Saving energy: For the smooth running of hotels, huge amounts of fossil fuel energy and electricity are used on daily basis (Prud'homme & Raymond, 2013). The need to save and reduce energy falls within the remit of sustainability management. It is thus tactically binding for hotels to implement renewable energy programs like wind and solar power usage, installation of smart and energy-efficient appliances, and motion sensors that automatically turn lights on in low-traffic areas, using energy efficient light bulbs, controlling guestroom energy consumption by using digital thermostats. Knowing that SET is about people reciprocating to those who benefit them, Farrou et al. (2012) and Kim et al. (2017) found that the implementation and communication of energy conservation practices of hotels significantly enhances guest satisfaction and creates future intention for repeat purchase (CCB). Hence, the second hypothesis is set out as follows:

H_{02}.   *Saving energy of hotel sustainable practices positively and significantly influences CCB.*

Waste management: bothers on taking measures to prevent wastage of resources and ensure sustainable disposal of waste (Mensah, 2020). According to Chaabane, Nassour and Nelles (2018), the hotel industry is a major contributor to greenhouse gas emissions by generating a huge amount of dry waste (e.g., cans/metals, paper, plastic, and other garbage) and wet waste (e.g., cooking oil waste, garden, and food waste) that ends up in landfills. It is worth reiterating that waste generated by hotels lead to the destruction and deterioration of ecological resources. From the SET standpoint, CCB is one form of behavior that is exhibited to reward hotels for having waste management and reduction mechanisms. On this basis, Kirk (1998) and Han et al. (2018) found that customers tend to be happy and prefer hotels that have waste management and reduction strategies (i.e., 3R strategy: reduce-reuse-recycle) via waste segregations, using electronic means of communication instead of paper, grinding the remaining guest soaps to use as laundry detergent, and purchasing products containing recycled content. The third hypothesis is therefore theorized as follows.

H_{03}.   *Waste management of hotel sustainable practices positively and significantly influences CCB.*

Noise management: is a strategically relevant sustainability issue within the hotel industry because hotels produce high levels of noise which then leads to increased stress levels, sleep disturbance or hearing damage (Mensah, 2006). Also, noise pollution has enormous environmental consequences and does grievous damage to wildlife through interference with breeding cycle. A noisy hotel will disrupt guests' sleep, concentration, and communication, as well as robbing people of their good leisure time and depriving them of enjoyment and satisfaction. Since noise management has the propensity to increase guest satisfaction (Scanlon, 2007), we argue from the SET point of view that the implementation of such measures will make customers obligated to reciprocate the hotel's behavior of noise management that has benefited them to engage in CCB. Some of these measures requires hotels to reduce noise from media devices and appliances, repair or replace old machinery, installation of soundproof systems, and usage of earplugs or earmuffs. Based on the discussions above, the fourth hypothesis is as follows:

H_{04}:   *Noise management of hotel sustainable practices positively and significantly influences CCB.*

Air quality management is one of the greatest scourges of this era, not only because of its impact on climate change, but also due to its impact on public and individual health leading to increased sickness and death (Perera, 2017). Hotels pollute the air through the release of gases and dirty or contaminated air from various utilities like kitchen gas and firewood ovens, fumes or emission from materials being cooked, boiler and diesel generating set exhausts and release of Chlorofluorocarbons from refrigerant (Vatan & Yilmaz, 2020). All these have negative effect on environment and health. When customers are satisfied with a service provider, SET warrants them to reciprocate the gesture through CCB. As found by Chen (2019), air quality management is directly tied to guest satisfaction and positive word-of-mouth and as such hotels are preventing air pollution using renewable energy sources instead of those, which emit harmful exhaust gases to the environment. Similarly, solar collectors, specialist windmills can be installed; heat energy from geothermal sources or biomass can be used to prevent air pollution. Therefore, the fifth hypothesis is set out as follows.

H_{05}:   Air quality management of hotel sustainable practices positively and significantly influences CCB.

Food quality management: Globally, food preferences are sprouting in ways that are detrimental to both human health and the environment (Clark et al., 2019). Foley et al. (2011) revealed that artificial food production accounts for 30% of global greenhouse gas emissions, occupies 40% of earth's land, nutrient pollution that damages ecosystems and water quality. Consequently, consumers are concerned as pointed and would thus rather prefer dietary, nutrients and supplementary foods with the aim of addressing environmental and health issues such as weight loss, cholesterol, and sugar levels. According to Kapiki (2012), quality food management relates to the production of organic food as well as the offering adequate nutritional information on the food and beverages offered. From the SET viewpoint, we argue that guest will be obliged to reciprocate this deed by engaging in CCB, leading to our sixth hypothesis as follows.

H_{06}:   Food quality management of hotel sustainable practices positively and significantly influences CCB.

METHODOLOGY

Sample and Data Collection

To empirically test or examine the hypothesized relationships forming the basis of this study, quantitative research approach with the use of a structured questionnaire was utilized. The sample size for the study was 500 but after data collection, 419 questionnaires were received from guests of six 4 and 5 star-rated hotels in Accra. Data obtained after cleaning (Valid Data) were 358 respondents representing about 72% of the sample size. The 4 and 5 Star-rated hotels were chosen because they represent luxury and class among hotels and most importantly, they are celebrated for showing commitment to the protection of nature and the environment (Abdou et al., 2020). Additionally, Accra was the focus because as the capital city, it has the highest number of star-rated hotels as compared to the remaining 15 regions in Ghana (Narteh et al., 2013).

Generally, hotels are rated (ranging from 1 to 5) based on the quality of services or facilities provided (Hinson, Abdul-Hamid & Osabutey, 2017). Thus, a low rating shows low service delivery, whereas a high rating indicates excellent service delivery. In this study however, only 4-and-5-star-hotels were selected because of the enormity of sustainability practices. With written permission from the management of the sampled hotels, the intercept

survey approach which means collecting data from consumers on site while they enjoy the service offered (Walls, 2013), was employed in gathering the data. Hence, for the purposes of this study, the respondents were selected based on their prior experience and interaction with the hotels.

To identify respondents for the sample, the study used intercept sampling techniques and customers who were willing provided answers to the questionnaires. To begin with, all the 4 and 5 star hotels were approached, and consent sought. We conveniently selected individuals found in the lobby of the hotels who provided consent at the time of visit to provide answers to the questionnaires (Figure 1).
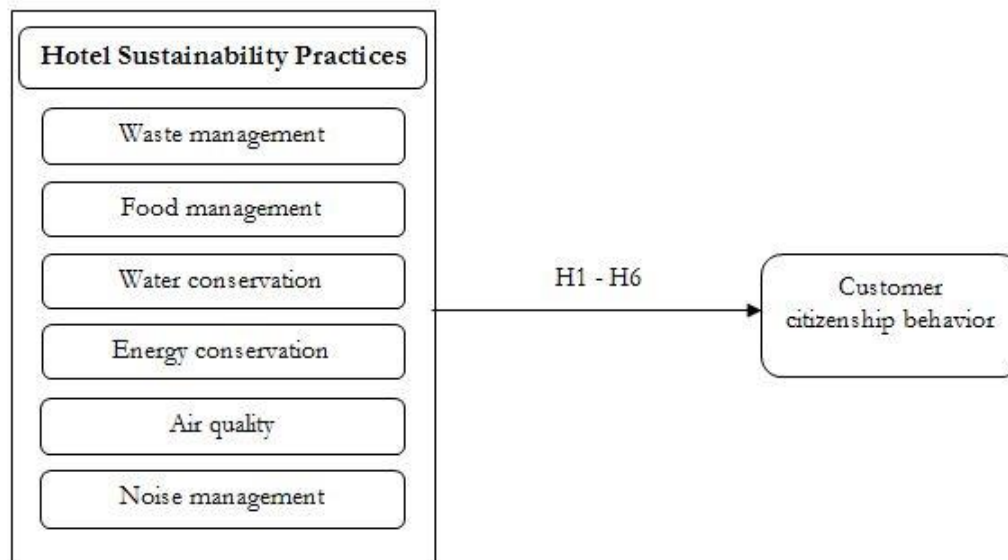
FIGURE 1
RESEARCH MODEL

Measures

The questionnaire for the survey was divided into two sections. The first section required respondents' demographic data, where participants were asked to provide information about their gender, age, marital status and level of education. The second section had questions on the major constructs of the study. The statements measuring these constructs were measured on a five-point Likert scale anchored with 1 "strongly disagree" to 5 "strongly agree" (Abdou et al., 2020). All the measurement items were adapted from prior studies. The items measuring water sustainability practices, waste management and reduction and food sustainability practices were adapted from Kim and Hall (2020) and were respectively measured 6, 6 and 9 items. Likewise, energy sustainability, air quality management and noise pollution management were measured with 6, 3 and 3 items respectively and were adapted from Abdou et al. (2020). Finally, CCB had 8 items and were respectively adapted from the works of Balaji (2014).

RESULTS

Sample Characteristics

The demographic profile of respondents is presented in Table 1. Respondents were largely male (70.1 percent), with females constituting only 29 percent. The dominant age group was 40 – 49 years (36.3 percent), followed by those in the age bracket of 30 – 39 accounting for 35.7 percent. The lowest age group was 50 – 59 years accounting for 8.4 percent. The educational profile shows that respondents were mostly undergraduates (55.9 percent), secondary school (27.7 percent), post graduate degree (11.5 percent) followed by those junior high or below education (1.4 percent) (Table 1).

Table 1 DEMOGRAPHICS PROFILES OF RESPONDENTS			
Profiles	**Categories**	**No.**	**(%)**
Gender	Male	251	70.1
	Female	107	29.9
Age	18 – 29	70	19.6
	30 – 39	128	35.7
	40 – 49	130	36.3
	50 – 59	30	8.4
Educational level	Junior high or below	5	1.4
	Technical/vocational	13	3.6
	Secondary school	99	27.7
	Undergraduate	200	55.9
	Post graduate degree	41	11.5
Income per month (GH)	Less than 3,000	205	57.3
	3,001 – 5,000	100	27.9
	5,001 – 7,000	39	10.9
	7,001 and above	13	3.7

Validity and Reliability of the Measures

Using Lisrel version 10, confirmation factor analysis (CFA) was performed to ensure convergent and discriminant validity among the scale items used. The results indicate a good fit between the hypothesized four-factor model as presented in Figure 1. Fit indices such as Tucker–Lewis's coefficient (TLI), incremental fit index (IFI), comparative-fit index (CFI), standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA) were used to examine the model. The fit indices: TLI = 0.95; IFI = 0.96; CFI = 0.96 surpassed the .90 benchmark (Tabachnick & Fidell, 2001). Similarly, the degree of misfit was also tolerable, with SRMR = 0.05 and RMSEA = 0.05, under the relevant benchmark of .08. Furthermore, the model fit is further bolstered through $\chi2$ (d.f.) = 1.56 (Pclose = 0.77). To guarantee that each factor loading in Table 2 is greater than 0.5 – meeting the requirements for acceptability, it became statistically necessary for modifications to be done to some of the items via stage-by-stage re-specifications of the weak items. Accordingly, scale items were rather dropped systematically to ensure that the deletion of each item was necessary. During the modification of the original unfitted model, 6 FSP items were deleted, 4 items were deleted from the WSP, another 3 deleted from ESP, and 6 items from CCB. So, 19 items were deleted after the CFA which left the new purified constructs with 22 items which provided the best fit indices (Table 2).

Table 2
MEASUREMENT MODEL RESULTS

Construct and measurement items	Estimate	S. E	T-Value
Waste Management Practices (WMP)			
This hotel uses recycled materials (e.g., paper, plastic, wood)	0.66	0.04	11.27
This hotel uses strategies for reducing food waste	0.77	0.04	13.88
This hotel uses strategies for reducing water waste	0.77	0.04	14.05
This hotel uses durable items rather than disposable products	0.76	0.04	13.69
This hotel uses local produce in food preparation	0.68	0.05	11.83
This hotel donates leftover food to food banks	0.71	0.05	12.42
Food Sustainability Practices (FSP)			
This hotel has smaller size servings of meals	0.73	0.04	13.26
This hotel mainly serves vegetable dishes	0.94	0.04	18.77
This hotel does not have a self-service system	0.78	0.04	14.39
Water Sustainability Practices (WSP)			
The hotel protects and restores water-related ecosystems by collecting rainwater and using it for garden irrigation or flushing toilets	0.73	0.04	9.87
The hotel improves water quality by increasing recycling and safe reuse of wastewater	0.73	0.05	9.86
Energy Sustainability Practices			
This hotel uses sensors in the rooms to control lighting, air conditioning and other equipment	0.69	0.04	11.41
This hotel uses various means to encourage guests to consume less electricity	0.68	0.04	11.27
This hotel uses key-card systems that control lights	0.77	0.04	13.11
Air Quality Management			
This hotel has clear designation of smoking and non-smoking areas	0.75	0.04	13.38
This hotel has facilities monitoring and maintaining good air quality	0.89	0.04	16.82
This hotel has good ventilation in the rooms, lobby and restaurant	0.78	0.03	14.19
Noise Pollution Management			
This hotel has acceptable level of noise	0.79	0.03	14.19
This hotel has clear directions to control noise levels	0.88	0.04	17.06
This hotel has the mechanism to maintain soundproof noise levels	0.81	0.03	15.22
Customer Citizenship Behavior			
I would say positive things about this hotel to others	0.70	0.04	10.85
I would give constructive suggestions to this hotel on how to improve its services	0.83	0.04	12.68

We proceeded to examine the reliability of the seven constructs by extracting the composite reliability (CR) Table 3. From the analysis, the CR results ranged from 0.70 – 0.87, exceeding the accepted criterion of 0.6 and above (Bagozzi & Yi, 2012). Regarding convergent validity, the average variance extracted (AVE) for each construct was likewise examined. These were all found to be above 0.5 Table 3, signifying convergent validity (Khan et al., 2016). While for discriminant validity, the AVE values for each construct are compared with the squared individual inter-construct correlations, as presented in Table 3 (Fornell and Larcker, 1981). It emerged that all the AVE values were greater than the square of each inter-construct correlation; thereby satisfying the criteria for discriminant validity. Furthermore, all values of HTMT ratio, as shown in Table 4, were <0.85. Such tests proved that there are no issues of discriminant validity of the constructs studied Tables 3 & 4.

Table 3
VALIDITY ANALYSIS

	CR	AVE	MSV	MaxR(H)	Waste	Food	Water	Energy	Air	Noise	CCB
Waste	0.87	0.528	0.307	0.874	**0.726**						
Food	0.859	0.673	0.307	0.909	0.554***	**0.82**					
Water	0.70	0.535	0.205	0.697	0.335***	0.385***	**0.732**				
Energy	0.755	0.507	0.377	0.761	0.367***	0.396***	0.453***	**0.712**			
Air	0.847	0.649	0.278	0.865	0.352***	0.362***	0.337***	0.423***	**0.806**		
Noise	0.866	0.684	0.377	0.874	0.459***	0.350***	0.332***	0.614***	0.336***	**0.827**	
CCB	0.743	0.593	0.31	0.765	0.353***	0.360***	0.292***	0.557***	0.527***	0.350***	**0.77**

Table 4
HTMT ANALYSIS

	Waste	Food	Water	Energy	Air	Noise	CCB
Waste							
Food	0.616						
Water	0.345	0.373					
Energy	0.369	0.422	0.46				
Air	0.368	0.407	0.353	0.419			
Noise	0.45	0.379	0.334	0.616	0.337		
CCB	0.378	0.392	0.318	0.553	0.549	0.346	

SEM ANALYSIS AND HYPOTHESES TESTING

SEM was used to examine the causal relationships between the dependent and independent variables that are hypothesized in the research framework. Before then, the model fit indices of the structural model were examined, and the results indicates an overall model fit (SRMR = 0.07, RMSEA = 0.07, CFI = 0.98, TLI = 0.95, IFI = 0.98, $\chi2/d.f. = 2.30$, Pclose = 0.15) (Schreiber, 2008). The estimates for the test of direct relationships are presented in Table 5. These capture the results of the tests for H1 through to H6. As can be observed from Table 5, four of the hypotheses were supported (H1, H4, H5, H6) while two (H2 and H3) were not supported. Seeing that and confirmed that demographic variables play a crucial role in shaping consumer behavior patterns, this study examined the influence of gender and age on customer citizenship behavior because of the existence of hotel sustainability practices. Accordingly, the findings only confirmed the statistical impact of age on customer citizenship behavior by virtue of sustainability practices of hotels Table 5.

Table 5
HYPOTHESES TESTING RESULTS

			Estimate	S.E.	C.R.	P-Value
H1: Waste sustainability practices	->	Customer citizenship behavior	0.11	0.05	2.04	0.04
H2: Food sustainability practices	->	Customer citizenship behavior	0.04	0.05	0.67	0.50
H3: Water sustainability practices	->	Customer citizenship behavior	-0.10	0.05	-1.88	0.06
H4: Energy sustainability	->	Customer citizenship	0.58	0.07	8.91	***

practices		behavior				
H5: Air sustainability practices	->	Customer citizenship behavior	0.37	0.05	7.66	***
H6: Noise sustainability practices	->	Customer citizenship behavior	-0.17	0.06	-2.82	0.01
Gender	->	Customer citizenship behavior	-0.03	0.08	-0.61	0.54
Age	->	Customer citizenship behavior	0.03	0.04	0.81	0.42

DISCUSSION AND CONCLUSION

Consumer behavior patterns particularly customer citizenship behavior intentions, is crucial for firms' success. Customer citizenship behavior necessitates customers to offer service organizations important feedback, advocacy, help and tolerance. Though an increasing number of studies have investigated customer citizenship behavior in service settings (Choi and Lotz, 2018; Woo, 2019), there is still a call for research that examines the driving forces of customer citizenship behaviors. To fill this research gap, the current study provides the framework to explain how six dimensions of hotel sustainability practices influence customer citizenship behavior in an emerging country perspective. With the United Nations (UN) Sustainable Development Goals (SDGs) being a crucial global conversation, particularly when scholars have illustrated that the rapid growth of the hotel industry contributes significantly to environmental degradation globally, as hotels generate huge amount of waste, consume a large amount of food, energy and water for heating, cooling and lighting among others, which negatively affects the environment (Chan & Hsu, 2016; Ali et al., 2019). The growing interest in the principles of sustainable development, and the resulting pressure from the media, government, NGOs and consumer sources to increase activity levels in this area, is compelling many hotels to more and more implement practices that are more environmentally friendly (Khatter et al., 2021). Consequently, some hotels especially star rated ones have implemented environmental policies to precisely promote environmental preservation in the hope of improving the quality of human lives. These environmental polices (see Figure 1) are examined in this study to ascertain their predicting role for customer citizenship behavior. Drawing on the social exchange theory, we extend sustainability marketing literature exploring how hotel sustainability practices influence customer citizenship behavior.

The findings of our study slightly differ from previous studies conducted in other contexts (Abdou et al., 2020; Kim and Hall, 2020) because four out of the six empirically examined hotel sustainability practices significantly influence customer citizenship behavior in Ghana. The results indicate that air quality management and energy sustainability practices of hotels provided the greatest link to customer citizenship behavior. These findings are in tandem with prior existing studies. For instance, Park et al. (2021) and Zanni et al. (2022) found that air quality management in the hotel industry is crucial since poor indoor air can harm staff, guests, and customers. Thus, in congruence with previous studies, this research reinforces bad air quality in hotels can have a detrimental effect on the ecosystem, human health and cause major diseases. For hotels to show sustainability commitment requires that they keep a clear designated area for smoking, provide well-ventilated rooms and have in place mechanisms for monitoring and maintaining good air quality since they are crucial for influencing customer citizenship behavior. With respect to energy conservation practices, our findings confirm the works of Petrevska et al. (2016); Chan et al. (2020); Duric and Potočnik Topler (2021) who established that using a renewable energy system, like solar and wind energy coupled with using automatic sensors and giving energy saving tips to guest

significantly influences customer citizenship behavior. It can, therefore, be argued that personalizing guest experience through the adoption of smart energy saving tools is critical to earning customer citizenship behavior.

Concerning waste sustainability practices, a positive significant relationship with customer citizenship behavior has been confirmed in this study. This means that separating waste by offering clearly labeled containers and colored bins for collecting recyclables (e.g., glass, metal, cardboard, etc.) influences customer citizenship behavior (Manaktola & Jauhari, 2007; Lee et al., 2010). This result underscore the fact that managing waste effectively is essential for hotels to stay competitive and reducing their environmental footprint while meeting regulatory requirements. Food sustainability practices was found to have an insignificant effect on customer citizenship behavior, which contradict the works of Carballo-Penela and Castromán-Diz (2015); Pullman et al. (2009). Similarly, the relationship between water sustainability practices and customer citizenship behavior was found to be negative, equally contradicting the works of Yu et al (2017); Torres-Bagur et al. (2019). Contextually, the negative effect of food sustainability practices on customer citizenship behavior is not surprising given that foods served in star rated hotels in Ghana do not have labels indicating the organic nature (e.g., calorie and/or nutrition information) of the food and more so they are hardly hotel attendants to give further details on the food content. Similarly, the negative relationship between water sustainability practices and customer citizenship behavior could be credited general to water management challenges arising out of illegal mining activities in Ghana where most water bodies have been contaminated or polluted and widely reported by local and international media, and international organizations. Finally, noise sustainability practices of hotels significantly influence customer citizenship behavior but at a decreasing rate. This result is not surprising because most of the sampled star rated hotels do not have soundproof although are cited in commercial zones and on highways.

Theoretical Implications

This research contributes to the hospitality, sustainability and customer citizenship behavior literature in several ways, particularly with respect to making hotel activities more environmentally friendly. First of all, for the first time in the hotel sustainability literature, this study examined well-comprehensive hotel sustainability practices and established that they are strategically relevant in influencing marketing performance through customer citizenship behavior. Second, despite the growing interest in customer citizenship behavior, scarce scholarships have explored hotel sustainability practices as an antecedent for customers to engage in citizenship behavior in a developing country context (Huttunen et al., 2022). Thirdly, our theoretical contribution accentuates that contextual differences plays a crucial role in the link between the dimensions of hotel sustainability practices and customer citizenship behavior since food sustainability practices and water conservation practices were found to be insufficient to achieve customer citizenship behavior, which concludes that the link between elements of hotel sustainability practices and customer citizenship behavior is not positive worldwide. Lastly, this research finds that the social exchange theory explains the relationship between sustainability practices of hotels and customer citizenship behavior such that customers are prepared to reward firms that implement sustainability practices through customer citizenship behavior. This is in accordance with social exchange theory.

Practical Implications

With climate change being the most existential threat to human survival (Butler, 2018), implementing sustainability strategies to build a resilient climate thus securing our future is morally, ethically and strategically imperative (Reid, 2019). This is particularly

accurate when consumers in recent years are responsive and gravitate towards brands that sustainability conscious. Consequently, the findings of our research have some practical implications in the hotel industry as far as sustainability practices is concerned, particularly in developing countries, which have insofar received very little scholarly attention. For instance, the findings indicate that hotel customers are prepared to exhibit citizenship behavior when given their probably strong relationship with four of the examined hotel sustainability practices namely energy conservation practices, waste management practices, air quality management practices, and noise management practices. Also, it is chief that hotel managers not only implement sustainability practices but most importantly communicate all sustainability practices to hotel guests as this action will present a clearer picture of hotel sustainability practices thus contributing to customer citizenship behavior. Given that two of the hotel sustainability practices were insufficient in influencing customer citizenship, high levels of familiarity of sustainability practices of hotels are likely to change the narrative. Finally, hotel managers should know that customer citizenship behavior is not a given rather based on the "give and take" characteristic of social exchange theory meaning that guest will engage in citizenship behavior if sustainability practices are implemented.

LIMITATIONS AND FUTURE RESEARCH

In conclusion, this study addresses important gaps in the hotel sustainability and customer citizenship behavior literature in terms geographical scope, dimensions of hotel sustainability practices and how they influence guests to engage in citizenship behavior. To this end, this study yields momentous theoretical and practical insights. Nonetheless, the study is not free of limitations. The results of this study are based cross-sectional data gathered from one Sub-Saharan Africa country, which may inhibit the generalization of findings to the star-rated hotels in the region. Thus, it is worthy to apply this examined research model to other Sub-Saharan countries and other tourism and hospitality sectors like restaurants. Finally, the current study examined customer response to hotel sustainability practices only. Thus, future studies may want to link hotel sustainability practices to hotel financial performance in Ghana or other Sub-Saharan Africa cultural contexts as well.

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