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Original Article

The Mediating Role of Behavioural Intentions on the Relationship between Eco-Friendly Perceptions and Behaviour of Guests in Eco-Rated Camps at the Maasai Mara National Reserve, Kenya

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Theory of Planned Behaviour, Behaviour Intentions, Environmental Beliefs, Green Practices, Environmental Sustainability, Eco-Rated Hotels, Structural Equation Modelling.

ABSTRACT

The study sought to establish the mediating role of behavioural intentions on the relationship between eco-friendly perceptions and behaviour of guests in eco-rated camps at the Maasai Mara National Reserve (MMNR) in Kenya. The approach of the study was guided by Theory of Planned Behaviour (TPB) and a pragmatic philosophical position with an embedded mixed methods research design. Based on the visitor arrivals to the MMNR, 208, 620 visitors were targeted for the study from which 399 were selected using clustered, stratified and proportionate random sampling techniques. Data was collected using questionnaire survey method and analysed with the help of Structural Equation Modelling (SEM) based on the Partial Least Squares technique (PLS). Based on the 272 questionnaires that were returned, the results indicated that, behavioural intentions had partial mediation effect on the relationship between perceived behavioural consequences (40.8%) and perceived behavioural control (30.6%) on eco-friendly behaviour. However behavioural intentions did not have significant mediation effect on perceived subjective norms. The findings underscored the importance of understanding behavioural and control beliefs of hotel guests. Moreover, this study singled out some socio-demographic characteristics of guests which could have an indirectly link to subjective norms and proposed addition of religion, place of origin, travel companionship and monthly expenditure to the TPB. Future researches could deepen understanding of socio-demographic characteristics and their indirect link to subjective norms in different regions as well as investigating eco-friendly behaviour of guests in eco-rated hospitality facilities in Kenyan urban areas.

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INTRODUCTION

Tourism industry is a significant contributor to the world economic development. Apart from earning foreign exchange and contributing up to 10.4% of the global Gross Domestic Product (GDP), tourism industry supports one in every ten jobs in the world (World Travel & Tourism Council – WTTC, 2020a). In 2018, 8.5% of Africa's GDP and 6.7% of the continent's total employment were accounted for by tourism (WTTC, 2020b). Additionally, tourism supports global economy by providing rationale for infrastructure development in different parts of the world. According to the United Nations World Tourism Organization - UNWTO (2020a), rapid growth of tourist arrivals through to 2018 surpassed the 1.4 billion marks ahead of year 2020 projections. The remarkable progression continued to 2019 with 1.5 billion tourists and it was expected to grow by 3% to 4% in 2020. Out of the 1.5 billion tourists, 71.2 million tourists visited Africa, with Kenya receiving 2.05 million tourists (UNWTO, 2020b).

The industry was projected to start out strong in 2020, but a sharp plunge at the beginning of the year following the Covid-19 outbreak resulted to a shortfall relative to the expectations. Despite the pandemic, demand for tourism is on a steady recovery path. By 2022, the industry had recorded 63% recovery in visitor arrivals globally as compared to 2019 figures while, Africa had regained approximately 65% of its pre-pandemic visitors' arrivals, and Kenya registered a 70.45% increase in international arrivals (Tourism Research Institute, 2023). As tourism industry continues to promise a brighter future, its mutual relationship with hospitality operations can hardly go unnoticed. Yang et al. (2020) assert that demand for hospitality services is likely to increase with growth of tourism. As envisaged, a recent report affirmed an increased investment in Kenyan hospitality industry where 25 new hotels were set up in 2023, and a further 31 new units in the pipeline in 2024 (Mwenda, 2024).

In order for tourism and hospitality industry to sustain its exponential growth, there is need to boost efforts geared towards reduction of carbon footprint as assimilated throughout the UN Sustainable Development Goals (SDGs). The SDGs emphasise on the indispensable role of environment as foundation for development. Unfortunately, over the last few years, consumption of hospitality products has increased depletion of natural resources and caused severe ecological deterioration. For example, a total of 13.8 kg CO_2 is generated with every bed night and approximately 272 Mega joules of energy, 350 litres of direct water use, 6,000 litres of indirect water use and 42 m^2 of land use are consumed for each guest night (Nisa et al., 2017). Additionally, Intergovernmental Panel on Climate Change (IPCC, 2018) reported that the existing environmental maladies such as pollution, drought, biodiversity dilapidation, and global warming are partly attributed to unsustainable human activities. Upon realising this, many accommodation facilities around the world have subjected themselves to third-party eco-label certifications or have self-declared eco-labels to keep their environmental impacts in check.

However, some hotel guests do not act favourably when their participation is required in environmental conservation even though they seem to have intentions to act in favour. White et al. (2019) allude that discrepancy between words and actions of consumers is a major hurdle in promoting eco-friendly consumption. To boost eco-friendly behaviour, it is important to understand the decision-making process of human

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beings. Understanding of human behaviour has progressively been augmented by application of relatable theories and models. According to Clark et al. (2013), behavioural theories and models can be grouped into five major perspectives namely: self-regulatory, biomedical, cognitive, behavioural, and communicative perspectives. Morris et al. (2012) argue that theories with cognitive variables tend to place a substantial focus on individual intervention in the action. Examples of such theories include Health Belief Model (HBM), Social-Cognitive Theory (SCT), Protection Motivation Theory (PMT) and the Theories of Reasoned Action (TRA) and Planned Behaviour (TPB). However, there is no single theory or model that spells out absolute connections among elements that influence ecological behaviour. Instead, theories and models are independently applied to explain environmental behaviour from a certain standpoint. Even though these ideologies vary in their development, especially assumptions and concepts employed, they are instrumental in challenging and extending knowledge in the sphere of environmental behaviour. Therefore, this study sought to achieve the following objectives:

- To establish the direct effect of perceived behavioural consequences on eco-friendly behaviour of guests while controlling for behavioural intentions.
- To establish the direct effect of perceived subjective norms on eco-friendly behaviour of guests while controlling for behavioural intentions.
- To find out the direct effect of perceived behavioural control on eco-friendly behaviour of guests while controlling for behavioural intentions.
- To investigate the mediating role of behavioural intentions on the relationship between eco-friendly perceptions and behaviour of guests in eco-rated camps at the Maasai Mara National Reserve.

LITERATURE REVIEW

Theoretical Background

After a thorough interrogation of various theories related to human behaviour, Theory of Planned Behaviour (TPB) comes across as a more comprehensive supposition of behaviour process hence, it was considered the most applicable in this research. The concept was conceived by Icek Ajzen in 1985. According to Ajzen (1985), behavioural beliefs, normative beliefs, and control beliefs prompt intention which determines the likelihood to perform a particular behaviour. Strong intentions increase chances of acting in particular way and therefore, intentions become the determinant of the behaviour. The concepts under investigation were borrowed from the three beliefs. Perceived behavioural consequences was conceived for behavioural beliefs, perceived subjective norms from normative beliefs and perceived behavioural control from control beliefs. The standpoint of the study was that eco-friendly behavioural intentions are determined by the perceived outcomes of that behaviour, presumed approval of that behaviour by significant others and one's imagined ability to carry out the actions. Intentions are characterised as the degree of interest and willingness to participate in environmental conservation. Once, the behavioural intentions are considered favourable, the actual behaviour is executed.

Mediating Role of Behavioural Intentions to Eco-Friendly Behaviour

Borrowing from the TPB, this study refers to eco-friendly behavioural intentions as psychological readiness to be mindful of the environment during their stay. This implies that behavioural intention is mediator between factors that affect behaviour and the behaviour itself. This statement has been endorsed a number of empirical studies which show there is a positive relationship between behavioural intentions and actual behaviour. Moreover, many scholars have asserted that a particular pro-environmental behaviour depends on behavioural intention. For instance, a study by Cai et al. (2019) found that intentions positively influenced low carbon commuting behaviour in

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residents of China. Other studies which supported these findings include Ricci et al. (2018) on the execution of eco-friendly convenience consumption behaviour, Li et al. (2020) on purchase and consumption of environmentally friendly agricultural food, and Wang et al. (2018a) on tourists' responsible environmental behaviour among others. This means when intentions to perform a certain behaviour increases, the likelihood of performing the specific behaviour increase as well and vice versa. However, other studies argue that behavioural intentions do not necessarily lead to actual behaviour. Researches state that people who claim to have favourable intentions to be eco-friendly fail to transmute the plans to actual behaviour (ElHaffar et al., 2020; Echegaray & Hansstein, 2017). The studies suggest that certain limitations remain and might depress one' intention to act in a specific manner. Some of the reasons behind the inconsistency include inconvenience, perceptions of cost cutting and decreased luxury as major limitations to choosing to stay in a green hotel (Baker et al., 2013), denial and incompatible goals with regard to climate change as key barriers to taking climate change action (Gifford & Chen, 2017). Possible solutions to these intention-behaviour discrepancies that have been suggested including, looking into the consumer perceptions concerns and increasing build upon their existing knowledge (ElHaffar et al., 2020).

Additionally, another study claims that behavioural intentions are preceded by an individual's attitudes and subjective norms (Budovska et al., 2019). However, positive attitudes and subjective norms do not necessarily lead to favourable intentions. Ajzen (1991) states that some constraints such as money and time can prevent an individual from performing a particular expected behaviour. This can be seen when a hotel guest finds sorting waste into designated bins too time-consuming making it difficult for them to give a hand in waste recycling. This implies that attitude and subjective norms are not the only antecedents of behaviour, but perceived behavioural control also plays a part. The power of each of these antecedents in affecting behavioural intentions depends on the situation and context (Braksiek et al., 2021). A study on behavioural intention in purchasing environmentally friendly agricultural food in China showed that subjective norms positively affect but attitude had no significant effect on the same (Li et al., 2020). Intention of using bicycles as low carbon means of commuting was positively affected by subjective norms in males, whereas attitude towards sharing of bicycles and perceived behavioural control positively affected intention in females (Cai et al., 2019).

Incidentally, demographic profile of an individual also plays a part in this. Several studies show that there is need to treat males and females differently with regard to promoting positive intentions. In a study on environmentally responsible intentions across genders, it was revealed that behavioural intentions in women can be increased by increasing perceived behavioural control and subjective norms but not their attitudes (Braksiek et al., 2021). Another study found that consumption of environmentally friendly agricultural food was greater in females than in the male counter parts (Li et al., 2020). In the same study, consumption varied across different income brackets. Similarly, Cai et al. (2019) discovered that intention of using low carbon means of commuting had greater positive effect on females' behaviour of bicycle use than in males. Contrary to these findings, Song et al. (2019) found out that there was no significant relationship between gender and use of eco-friendly appliances and Liu et al. (2019) shares similar sentiments. Another study revealed that age of residents negatively influenced their intention to pay for separate collection of household solid waste which would facilitate reuse, reduction and recycling (Wang et al., 2018b). The researchers argued that it could be as a result of older people's sensitivity to costs and their tendency to collect and sort own household waste. Li et al. (2019) stated that demographic variables such as level of education, gender, age and level of income have positively significant effect on eco-friendly behaviour. The study indicated that women, more educated young

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individuals who earn highly are apt to be eco-friendly. These findings were attributed to females being more cooperative and natural caregivers, greater awareness of environmental destruction, concern for future generations, and a burning desire to live in a healthy environment which makes them to freely pay for conservation. Based on the literature reviewed, the study hypothesized:

$H_0$1: Behavioural intentions do not mediate the relationship between the eco-friendly perceptions and behaviour of guests in eco-rated camps at the Maasai Mara National Reserve.

METHODOLOGY

The approach of the study was guided by Theory of Planned Behaviour and a pragmatic philosophical position with an embedded mixed methods research design. Based on the average number of visitors that the MMNR received between year 2015 and 2019, 208, 620 visitors were targeted for the study (Kenya National Bureau of Statistics, 2022). From this proportion, 399 visitors were selected using clustered, stratified and proportionate random sampling techniques. Data was collected using questionnaire survey method. From the 272 questionnaires that were filled and returned. Quantitative data was analysed using descriptive statistics which included frequencies, percentages, means and standard deviation while, inferential statistics were derived from Structural Equation Modelling (SEM) based on the Partial Least Squares technique (PLS).

Section one of the questionnaire required the respondents to give personal details such as gender, age, continent of origin, travel companionship, length of stay, purpose of visit, religious affiliation, level of education and monthly expenditure. The subsequent sections had questions on eco-friendly perceptions, behavioural intentions and eco-friendly behaviour. All questions in these sections were presented on a 5-point Likert scale whose ratings were as follows: strongly disagree (1), disagree (2), don't know (3), agree (4) and strongly agree (5). Questionnaire items for measuring eco-friendly perceptions were adopted from Ajzen (2013) while those measuring eco-friendly behavioural intention were adapted from Fishbein and Ajzen (2010). Items designed to measure eco-friendly behaviour were partly derived from Whitmarsh and O'Neill (2010) and Capstick et al. (2019).

RESULTS

Data Screening

There were missing values in socio-demographic characteristics such as religious affiliation, highest level of education achieved and approximate monthly expenditure. However, these socio-demographic factors could not affect structural equation modelling (SEM). Even so, mean substitution technique was only applied for monthly expenditure. No outliers were detected in the dataset.

Profile of the Study Respondents

The analysis in *Table 1*, shows that 62.50% of the respondents were male and 37.50% were female. They had an average age of 41.16 years. Majority of the respondents (36.40%) had travelled in organised tour groups and the average number of days in the hotel was 3.65 days. Those that had travelled for leisure were 62.50%, 21.69% for business, 11.76% for both business and leisure and 4.04% had travelled for other reasons. The nationality of the respondents was very diverse consisting of more than 10 countries and those of the Kenyan nationality were the majority at 19.12%. Majority of the guests were Christians (47.43%) and 29.78% did not disclose their religious affiliation. The respondents' highest level of education was; high school education (4.04%), college certificate or diploma (15.81%), undergraduate degree (37.50%) and, postgraduate degree (8.46%). The average monthly expenditure of the respondents was US$711.54.

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Table 1: Socio-demographic profile of camp guests

Characteristic	Category	Frequency	%	Mean	Std. Dev
Gender	Male	170	62.50	N/A	N/A
	Female	102	37.50		
Age	18-26 years	23	8.46	41.161	10.5212
	27-42 years	130	47.79		
	43-58 years	92	33.82		
	59-77 years	27	9.93		
Travel companionship	Solo	78	28.68	N/A	N/A
	Spouse	51	18.75		
	Family	44	16.18		
	Group	99	36.40		
Length of hotel stay	1-2 days	120	44.12	3.654	3.1968
	3- 6 days	118	43.38		
	A week or more	34	12.50		
Purpose of visit	Business	59	21.69	N/A	N/A
	Leisure	170	62.50		
	Both	32	11.76		
	Others	11	4.04		
Nationality	Kenyan	52	19.12	N/A	N/A
	French	20	7.35		
	Chinese	28	10.29		
	American	30	11.03		
	Brazilian	12	4.41		
	British	12	4.41		
	German	8	2.94		
	Moroccan	13	4.78		
	Tanzanian	11	4.04		
	Others	86	31.62		
Religion	Christianity	129	47.43	N/A	N/A
	Islam	34	12.50		
	Buddhism	15	5.51		
	Others	13	4.78		
	Did Not Say	81	29.78		
Highest level of education	High school	11	4.04	N/A	N/A
	College	43	15.81		
	Graduate	102	37.50		
	Postgraduate	23	8.46		
	Did Not Say	93	34.19		
Monthly expenditure	Low	4	1.47	711.54	504.93
	Medium	127	46.69		
	High	13	4.78		
	Did Not Say	128	47.06		

Note: N=272, N/A-Not Applicable

Reliability and Diagnostic Tests

Cronbach's alpha coefficients (α) were above the 0.70 threshold (Cronbach, 1951) (perceived behavioural consequences =0.705, perceived subjective norms =0.7517, perceived behavioural control =0.7044 and eco-friendly behaviour =0.8772) thus, they were reliable and valid. Distribution of data was reasonably normal with skewness values ranging between -1.166 and 0.565 while, kurtosis values ranged between -0.440 and 0.709. All were within the acceptable range (Hair et al., 2022) (see *Table 2*). The level of heteroscedasticity was small as it was depicted in the residual vs fitted plot of Homogeneity of Variance test. The graph showed a strewed pattern

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with higher values of independent variables but a crowded pattern with middle and lower values. Kaiser Meyer Olkin index was 0.637 >0.50 and Bartlett's Test of Sphericity was significant (χ^2 =591.699, df = 55, p=0.000) p<0.05 (Shrestha, 2021). These results indicated that the data was plausible to conduct factor analysis.

Structural Equation Modelling - Partial Least Squares (PLS-SEM)

This followed a two-step procedure which consisted of assessing the measurement model and assessing the structural model.

Assessment of Measurement Model

The measurement model was assessed using goodness-of-fit, convergent validity, discriminant validity and multicollinearity tests. The overall goodness of fit of the model was assessed using chi-square (χ^2) index which suggested that the absolute fit was not acceptable (χ2= 6806.904, df = 272, p = 0.00) p <0.05 (Hu & Bentler, 1998). This prompted use additional indices with acceptable thresholds as follows: RMSEA<0.10 (MacCallum & Austin, 2003), SRMR<0.08 (Hu & Bentler, 1998), CFI ranges between 0 and 1 (Hu & Bentler, 1998). The tests showed that RMSEA=0.04, SRMR=0.08 and CFI= 0.769 thus, the indices were within the acceptable threshold. Composite reliability (CR) coefficients and average variance extracted (AVE) values illustrated the convergent validity. The CR coefficients were between 0.703 and 0.892 >0.60 (Hair et al., 2014) while, the AVE values ranged between 0.50 and 0.68 >0.50 (Hair et al., 2010), indicating that all values in the present study were within the recommended threshold (see Table 2). The discriminant validity test used Fornell-Larcker's criterion to guarantee external consistency of the measurement model. There is external consistency if the square root of each construct's AVE is greater than the correlations with other latent constructs (Fornell & Cha, 1994; Rönkkö & Cho, 2022). The results showed discriminant validity was admissible (see Table 2). Variance inflation factor (VIF) and Tolerance values were used to test for multicollinearity (1/VIF). According to Field (2009), a VIF value that is above 10 and a tolerance value below 0.10 suggest a high correlation among the predictor variables. From the analysis, the average VIF value of perceived behavioural consequences was 1.47 while, for perceived subjective norms was 1.52 and that of perceived behavioural control was 1.50. The tolerance values ranged between 0.488 and 0.887 thus, the level of collinearity was reasonable.

Assessment of the Structural Model and Hypotheses Testing

According to Hair et al (2019), three measures are used in assessment of the structural model. The three measures are: R^2 values using PLS algorithm techniques to evaluate the predictive accuracy of the model; Q^2 statistic using blindfolding techniques to evaluate the predictive relevance of the model; and hypothesis testing using bootstrapping technique. The R^2 values obtained indicated that perceived behavioural consequences caused 31.5% variation in eco-friendly behaviour while, perceived subjective norms caused a variation of 74.40% and perceived behavioural control caused a variation of 52.70%. R^2 values range between 0 and 1, and values of 0.75, 0.50 and 0.25 are considered to be substantial, moderate and weak explanatory power, respectively (Henseler et al., 2009). The second measure was Q^2 statistic whose values should be above 0 (Sarstedt et al., 2014). Moreover, Q^2 values of 0.50, 0.25, and > 0 are considered to have large, medium, and small predictive relevance, respectively (Qalati et al., 2022). The Q^2 value for PBCq was 0.826, for PSN was 0.902 and for PBC was 0.919 which indicated that the predictive relevance of the model was large and therefore, satisfactory. Testing of hypothesis testing was the last measure and was conducted in three stages.

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Table 2: Summary of normality test, convergent validity and discriminant validity (Fornell–Larcker criterion)

Study Construct	CR	AVE	Skewness	Kurtosis	EBII	EBIW	PBCC	PBCS	PBCqA	PBCqC	PSDN	PSIN
EBII	0.770	0.47	-0.728	1.618	0.859							
EBIW	0.832	0.54	-0.607	1.103	0.809	0.826						
PBCC	0.762	0.58	-1.166	0.466	0.545	0.591	0.961					
PBCS	0.756	0.53	0.065	0.709	0.779	0.672	0.586	0.974				
PBCqA	0.892	0.63	0.556	0.229	0.513	0.725	0.529	0.504	0.682			
PBCqC	0.703	0.68	0.565	0.248	0.649	0.590	0.702	0.545	0.569	0.811		
PSDN	0.763	0.50	-0.279	-0.233	0.757	0.766	0.604	0.958	0.569	0.724	0.660	
PSIN	0.877	0.66	0.491	-0.440	0.540	0.624	0.705	0.641	0.585	0.712	0.540	0.485

Note: Eco-friendly Behavioural Intentions-Interest (EBII), Eco-friendly Behavioural Intentions-Willingness (EBIW), Perceived Behavioural Control-Controllability (PBCC), Perceived Behavioural Control-Self Efficacy (PBCS), Perceived Behavioural Consequences-Affective Appraisal (PBCqA), Perceived Behavioural Consequences-Cognitive Appraisal (PBCqC), Perceived Subjective Descriptive Norms (PSDN), Perceived Subjective Injunctive Norms (PSIN).

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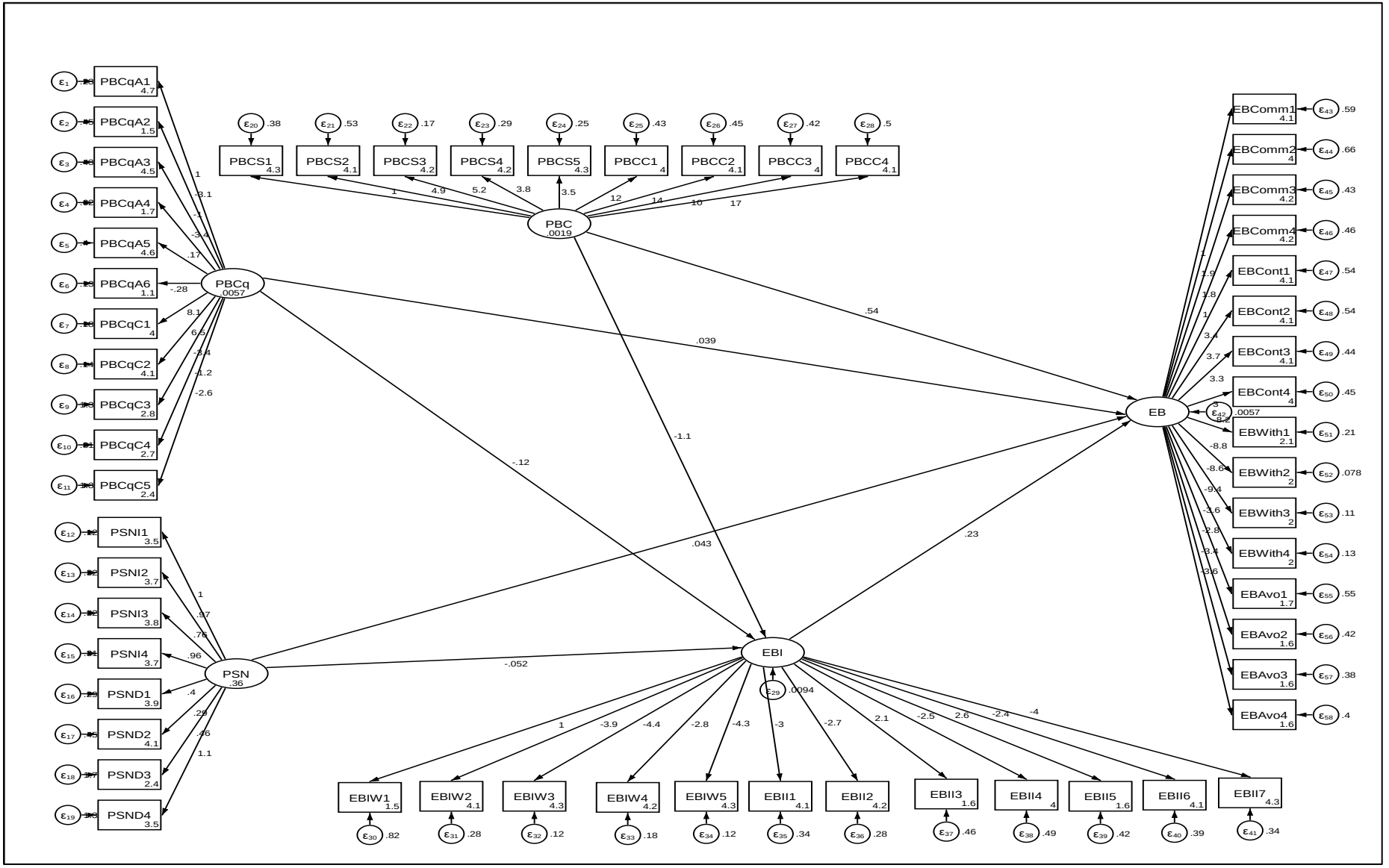
Figure 1: Path diagram showing the relationship between eco-friendly perceptions and behaviour through behavioural intentions.



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The first stage examined direct effect of eco-friendly perceptions on behaviour while controlling for the mediator variable (behavioural intentions). The study found that the direct effect of perceived behavioural consequences while controlling for behavioural intentions was significant with β=0.039, *p*=0.006. The direct effect of perceived subjective norms while controlling for behavioural intentions was insignificant, with β=0.043, *p*=0.107 while, the direct effect of perceived behavioural control was significant β=0.54, *p*=0.04. Since the direct effect of perceived behavioural consequences and perceived behavioural control when controlling behavioural intentions was significant, the two construct were included in the second stage. In this stage, the mediator variable was included in the path model and indirect effects of perceived behavioural consequences and perceived behavioural control on eco-friendly through behavioural intentions was significant (β=-0.0276, *p*=0.003) and (β=-0.253, *p*=0.049), respectively (see *Figure 1*). Then variance accounted for (VAF) was assessed for perceived behavioural consequences and perceived behavioural control in order to determine the strength of the mediating construct in the respective relationships with eco-friendly behaviour. The results showed that, behavioural intentions had a VAF value of 40.8% in the relationship between perceived behavioural consequences and eco-friendly behaviour while the path between perceived behavioural control and eco-friendly behaviour had a VAF of 30.6%. According to Sarstedt et al. (2017), VAF values below 20% indicate a very strong direct effect hence, no mediation, while VAF values between 20% and 80% suggest partial mediation and those above 80% indicate full mediation. Therefore, a partial mediation effect of behavioural intention on the relationship between perceived behavioural control and eco-friendly behaviour of guests in eco-rated camps at the Maasai Mara National Reserve was established.

DISCUSSION

In light of the findings reported in the previous sections, the mediating effect of behavioural intentions on the relationship between eco-friendly perceptions and behaviour of guests was examined. A three-step approach was used. The first stage involved evaluating the direct effect of eco-friendly perceptions on behaviour while controlling for the mediator variable (behavioural intentions). The second involved introduction of the mediator variable to examine the indirect effects of the constructs on eco-friendly. Lastly, variance accounted for (VAF) was assessed for constructs which met the conditions in the previous stage. The study found that the direct effect of perceived behavioural consequences while controlling for behavioural intentions was significant. The observation was similar to that of Lin et al. (2022) and Raza et al. (2023) which showed that positive emotions affected pro-environmental behaviour.

Contrary to the suggestion in the TPB, the study showed that perceived subjective norms had no significant effect on eco-friendly behaviour of hotel guests. These findings contradict similar studies by study by Lin et al. (2022); Wan et al., (2018) and Stoeva & Alriksson, (2017). A plausible explanation to this could be that the predictive role of subjective norms varies with a lot of factors. As noted from the socio-demographic profile of the respondents, this research was not conducted on homogenous sample. With reference to nationality, the survey included guests from more than 10 countries, religious affiliations of the respondents also varied from Christianity, Islam, Buddhism, Sikhism, Hinduism and Jewish, the respondents' travel companionship who were spouses, family or organised tour groups as well as whether the respondents were low spenders, medium spenders or heavy spenders. The direct effect of perceived behavioural control was significant. Empirical evidence from previous studies supports this postulation (Težak Damijanić et al., 2022); Tang et al., 2022). Therefore, perceived behavioural consequences and perceived behavioural control were included in the second stage. After including the mediator variable, the indirect effects were also significant. Consequently, the VAF was assessed, and it was concluded that behavioural

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intentions partially mediate the effect of perceived behavioural consequences and perceived behavioural control on eco-friendly behaviour of guests in eco-rated camps at the Maasai Mara National Reserve.

CONCLUSION

This study adopted the theory of planned behavior to examine the mediating role of behavioural intentions on the relationship between eco-friendly perceptions and behaviour of guests in eco-rated camps at the Maasai Mara National Reserve. In order to achieve this, direct effect of perceived behavioural consequences, perceived subjective norms and perceived behavioural control guests on eco-friendly behaviour while controlling for behavioural intentions was first established. The effect of perceived behavioural consequences and perceived behavioural control was significant while that of perceived subjective norms was not significant. Then the VAF showed that behavioural intentions partially mediated the relationship between perceived behavioural consequences and perceived behavioural control and eco-friendly behaviour of guests in eco-rated camps at the Maasai Mara National Reserve.

Implications and Recommendations

The findings of this study affirmed adequacy of the TPB in explaining human behaviour in addition to extending knowledge of pro-environmental behaviour in tourism and hospitality industry through the TPB lenses. By using PLS-SEM, this study offers new empirical support for the TPB and reveals how the proposed framework explains green behaviour in eco-rated accommodation facilities in MMNR. Moreover, this study singled out some socio-demographic characteristics of guests which could have an indirectly link to subjective norms. Perhaps, adding religion, place of origin, travel companionship and monthly expenditure to the TPB could present a larger scope of examining predictive role of subjective norms on pro-environmental behaviour in tourism and hospitality context. The study also underscores the importance of understanding behavioural and control beliefs of hotel guests. Since the presumed outcomes and ability to perform a given behaviour determine guests' eco-friendliness, participatory messages should be designed to make guests feel good whilst believing in their abilities. This will in turn make the possibility of actualising their plans greater. Future researches could deepen understanding of socio-demographic characteristics and their indirect link to subjective norms and sustainable behaviour of hotel guests in different regions. Additionally, an investigation on eco-friendly behaviour of guests in eco-rated hospitality facilities in Kenyan urban areas is desirable.

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