

# Impact of Employee's Environmental Concern on Ecological Green Behaviour: Mediation Mechanism of Employee Customer Oriented OCB and Organisational Commitment

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This study based on the Theory of Planned Behaviour, and investigated the indirect impact of employee environmental concern on ecological behaviour and employee satisfaction with the mediating effect of customer oriented discretionary behaviour and organisational commitment. Data was collected by employing a self-administrative questionnaire in two different time periods. By applying the PROCESS Macros on sample of 508 employees, the results explored that employee environmental concern is positively associated with ecological behaviour and employee satisfaction, and this relationship is also partially mediated by employee/customer oriented extra-role behaviour and organisational commitment. The findings of study guide the practitioners to appreciate the employees' extra-role behaviour and commitment with the organisations to provoke their ecological green behaviour in the wake of greening the hospitality sector.

**Key words:** *environmental concern; customer oriented extra-role behavior; organisational commitment; employee satisfaction; ecological behaviour*

## INTRODUCTION

The environmental issues, over the last few decades, have been perceived as a significant concern at both organisational and government levels (Robertson & Barling, 2017). Mounting concern demonstrated by the market, customers and modern legislations, have enhanced the awareness and understanding of organisations of handling the environmental problems, including hotels, restaurants and the broader hospitality sector (Chan et al., 2017). Research on environmental concern (EC) is a dominant theme of scholars with an emphasis on assimilating environmental approaches with human resource management, a synthesis worded “green human resource management” GHRM (Masri & Jaaron, 2017). They have noticed that employees’ participation is a significant factor to gain sustainable organisational development (Pham *et al.*, 2019). However, sustainability is linked with the ecological issues (Masri & Jaaron, 2017). Employee commitment with the organisation and customer oriented discretionary behaviour play a significant role in addressing environmental problems (Hwang & Lee, 2019). Previous studies have investigated the impact of the environmental attitude on employee ecological behaviour, however, the indirect effect of employee job attitudes and behaviour, promoting ecological green behaviour was less investigated. This research is based on the Theory of Planned Behaviour (TPB) with attempts to investigate the indirect influence of employee job attitudes and behaviours in the relationship of environmental concern with ecological behaviour in the context of developing employee green behaviour.

Environmental concern (EC) refers to an employee individual environmental global attitude, and is an integral factor to resolve the ecological problems (Bamberg, 2003). Preceding studies have investigated its positive influence on ecological behaviour and consumer attitudes to purchase green products (Chan *et al.*, 2017). Employee volunteer discretionary behaviour towards customers is vital to instigate feelings for green products. This organisational citizenship behaviour (OCB) of the employee is examined in three dimensions (Boiral & Paillé, 2012): (i) eco-civic engagement describes voluntary engagement in organisational environmental activities, (ii) eco-helping defines helping coworkers in resolving environmental issues, and (iii) eco-initiatives reflects discretionary behaviour to enhance organisational performance and promote green images of the organisation for the customer and the community. In this perspective, employee organisational commitment (OC) shares its contribution in the execution of the organisational environmental initiatives. The strong commitment of the employee with the organisation is assessed in three ways: (i) affective commitment supports the environmental programs, (ii) normative commitment generates a sense of obligation to support the initiatives and (iii) continuous commitment sustains loyalty towards the organisation (Allen & Meyer, 1990). Employees’ discretionary behaviour towards the customer, implicitly expresses their contentment with colleagues, the working situation and organisational policies. Concluding the discussion, employees’ commitment with organisation and their citizenship behaviour stimulate them to demonstrate ecological behaviour (EB) in the wider interest of the organisation and community. This paper, therefore, articulates and empirically validates the description of employee citizenship behaviour and commitment in the

light of greening the hospitality sector with major emphasis on environmental attitudes and ecological behaviour to culminate into improved organisational performance.

## **THEORETICAL PERSPECTIVE**

In the context of greening the hospitality sector, the TPB assists in predicting the employee ecological behaviour (EB). TPB argues that an employees' environmental attitude stimulates to demonstrate a specific behaviour. Also, employees' behavioural intention can be prophesied from a collective effect of two key elements: (1) employees' attitude toward the behaviour and (2) the subjective norms, demonstrating employees' understanding of the attitudes significant to others, (3) perceived behavioural control, worded as the employees' understanding of the scope. Extending the discussion on the TPB basis, the execution of environmental management system (EMS), hotel staff is desired to perform extra role behaviour to protect the environment and to sustain organisational performance (Cabral & Jabbour, 2020).

### **Linking Employee EC, Organisational Citizenship Behaviour, OC and EB**

Employee EC refers to the whole range of environmentally related perceptions, emotions, knowledge, values, attitudes, and behaviour (Bamberg, 2003). EC explains the degree to which people are conscious of the problems and support the effort to address / or show willingness to eradicate the problematic factors (Dunlap & Jones, 2002). This idea highlights two different aspects, perception of problems and willingness to support and personally contributes to resolving the issue. This reflects two common categories of EC including environmental attitude and willingness to protect the environment. EB refers to the "actions which contributes towards environmental preservation and /or conservation (Axelrod & Lehman, 1993). Employees' EB and their impact on natural environment are matters of public interest, and have been the subject of preferred choice for the scholars of psychological research and numerous studies have discussed the antecedents of individual EB, and also elucidate how these antecedents can be measured (Miroshkin et al., 2019).

Employee customer oriented OCB refers to an employee's individual volunteer behaviour demonstrated at the workplace to enhance customer satisfaction and service delivery (Dimitriadis, 2007). An individual employee can make the significant difference, therefore, organisations are required to promote employee engagement for promotion of environmental green practices (Cheema et al., 2020). Employee commitment is crucial to organisational "greening", adoption of environmental green practices for sustainable business operations (Cheema et al., 2020). Employees, often, have a sound understanding of production processes, which enable them to monitor and have compliance with the ongoing green procedures and also observe environmentally harmful activities. Employee satisfaction (ES), expressing contentment with colleagues and other mechanisms of the job, including the working environment and situation (Glisson & Durick, 1988), is the key factor for organisational

success in the hospitality sector. Customer loyalty is also characterised by the contentment employee feels with the organisation (Olugbade & Karatepe, 2019). Constant human dealings and reliance on other coworkers, maintaining the ES in hospitality has become a challenge for hotel management (Pham et al., 2019). To achieve ES, the hospitality sector is sharing considerable revenue on their employees by arranging soft skills training workshops, awarding benefits and appreciating certificates by acknowledging their services (Miah & Hafid, 2019). We postulate that:

**H1a:** Employee EC positively influences EB

**H1b:** Employee EC positively influences ES

**H1c:** Employee EC relates to organisational citizenship behaviour

**H1d:** Employee EC relates to OC

### **Linking Organisational Citizenship Behaviour, OC, EB and ES**

Customer oriented OCB is a constellation of non-mandated and individual initiated behaviours which exert significant efforts for customer satisfaction and quality service delivery. It anticipates customer needs and expectation, and customises the services to acknowledge their importance (Dimitriadis, 2007). Empirical evidence suggests that discretionary behaviour and a sense of obligation to remain committed with organisation are interlinked and influence each other (Asgari *et al.*, 2019). OC represents an employee connection with the organisation and is referred to a psychological state that portrays employee attachment with the working place and has implications to continue association in the organisation (Allen & Meyer, 1990). The role of employees in the hospitality sector remained misunderstood on the part of hotel employees. ES is expression of contentment by an employee with organisational job characteristics and working situation (Glisson & Durick, 1988); therefore, we presume that employees' demonstration of EC is based on their gratification related to the organisational initiatives. This study, therefore, explores the relationship in the context of recommending the execution of green practices in the hospitality sector.

**H2a:** Customer oriented OCB is positively associated with OC

**H2b:** Customer oriented OCB relates with ES

**H2c:** Customer oriented OCB positively influences employee EB

### **Linking OC, EB and ES**

Employee OC, in business research, has been investigated in the background of achieving organisational goals. Committed employees are the preferred choice of the organisation to gain the competitive market advantage (Ebeh *et al.*, 2017). Scholars are evinced that environmental management system promotes an ethical climate and the employee feels good, and this provokes their motivation to work hard (Asgari *et al.*, 2019). Social identity theory also

explores the relationship between environmental management and OC. Individuals pursue their social identity to improve self-esteem (Whitburn *et al.*, 2019).

EB refers to the “actions which contributes towards environmental preservation and /or conservation” (Axelrod & Lehman, 1993). Kaiser (1998) referred TPB to define the causes of EB that arises from behaviour intention looking at two factors: attitude towards behaviour and subjective norms. Relation to nature is linked with employees’ pro-environmental behaviour that provokes them to mitigate the negative ambitions towards nature, and promote green practices at the workplace (Whitburn *et al.*, 2019). In the hospitality sector, ES is identified as one of the key factors contributing towards organisational success. Customer loyalty is characterised by the fulfillment of their expectation and satisfaction. Constant human dealings and interdependency on other coworkers, ES is a challenge for hotel management (Olugbade & Karatepe, 2019). Keeping in view the significance of ES, the hospitality sector is upgrading skills through training workshops along with awarding benefits and appreciating certificates by acknowledging their services (Miah & Hafid, 2019).

**H3a:** OC is positively associated with EB

**H3b:** OC relates with ES

Employee customer oriented OCB significantly contributes in greening the hospitality sector. This behaviour gave a promising impression due to its potential to express organisational behaviour, particularly in the service industries (Wu *et al.*, 2013). Three dimensions of OCB including loyalty, participation (Van *et al.* (1994) and service delivery (Greenberg, 1991), suggest that customer-contact employees need to respond politely, and ensure reliable service delivery. The appreciation of employee services and rewards offered by the management, influences ES and strengthen ties with the organisation (Meynhardt *et al.*, 2020).

Human resources, being an integral component of a business organisation, have been investigated in connection with employee commitment, turnover intention, job satisfaction and motivation for improving organisational performance (Abid *et al.*, 2019; Pham *et al.*, 2019). However, in the hospitality sector, employee customer oriented OCB has been encouraged for developing better organisational image, developing pleasant memories for the sustainability of customer (Wu *et al.*, 2013), and also for reducing role stressors for the frontline employees (Pham *et al.*, 2019). The mediating role of employee/customer oriented discretionary behaviour in the previous studies was appreciated for promoting the understanding of the mystery between employee trust and OC, in the context of organisational leadership (Arshad *et al.*, 2020; Grego-Planer, 2019). Therefore, this study is designed to investigate the mediating impact of customer oriented OCB on the relationship between EC and ES.

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**H4:** Customer oriented OCB mediates the relationship between EC and ES

EC is a global attitude towards environment and environmental problems, which shows willingness to support the initiatives for the eradication of the issues (Bamberg, 2003). The results of various researches recommend that individual, managerial and organisational factors influence employee behaviour through the sense of commitment to EC (Pham et al., 2019). OC is associated with the degree to which employees are attached with the organisation where they work and whether they are ready to leave it, whereas ES is emotional mindsets resulting from the appraisal and recognition of employee achievements as results of OC (Locke, 1976). The relationships of OC and ES has been frequently researched in various contexts (Ekhasn, 2019). The mediating role of OC has been discussed in business organisations in connection with leadership and turnover intention, motivation, organisational culture and performance (Rantesalu *et al.*, 2017). In the hospitality sector, this role was studied in the relationship between emotional intelligence, supervisory support and job satisfaction (Azim et al., 2020). The review of literature demonstrates that the mediating role of OC in the hospitality sector, particularly in developing green employee behaviour, was less explored in the recent times. Therefore, this study proposes:

**H5:** OC mediates the relationships between EC and ES

Employee discretionary behaviour is classified into two subcategories (i) organisational citizenship behaviour-individual (OCBI) (ii) organisational citizenship behaviour-organisation (OCBO). OCBI denotes behaviours focused at individuals which benefit the organisation implicitly. OCBO represents behaviours, representing devotion, conscientiousness and job commitment, which endeavour to explicitly support organisational objectives (Williams & Anderson, 1991). Based on this new classification, Dimitriades (2007) recommended a new category, customer oriented OCB. The importance of this type of behaviour is echoed in the workplace, where constant and frequent interaction of employees and customers is observed to present the organisation to outsiders; therefore, customer oriented OCB is most favoured for the hospitality sector (Wu *et al.*, 2013), and significantly important for customer service delivery and satisfaction.

Prevailing caring and supporting behaviour in the workplace instigates the sense of commitment towards the organisation which supports the researcher's stance that employee discretionary behaviour influences employee commitment with the organisation. The employees' strong attachment with the organisation influences their contentment towards the job and other mechanisms including interaction with coworkers, management and working situation. Employees' discretionary behaviours towards coworkers and the organisation, intensify their commitments with the organisation, which encourages their contentment with organisational policies and working situations (Grego-Planer, 2019). Business organisations are confronting environmental problems, however, the hospitality sector is gaining awareness

regarding these issues (Tam & Chan, 2018). Therefore, both environmental attitudes and behaviour are interlinked, and TPB suggests that attitudes influence behaviour (Ajzen, 1991). However, the collaborating effect of customer oriented OCB and OC on ES was less discussed in recent research studies.

#### **H6:** Customer oriented OCB and OC mediates the relationships between EC and ES

Employee EC demonstrates the actions taken for the environmental preservation and or conservation (Axelrod & Lehman, 1993). A previous study had already explored the positive impact of employee EC on EB (Okumus et al., 2019). The prediction of EB by the employee who is environmentally concerned is based on the concept of Ajzen's TPB. To improve environmental performance, employees' participation in green behaviour is obligatory to grab the potential environmental problems to gain sustainable development of the hotel industry (Robertson & Barling, 2017). The adoption of environmental practices, employee environmental knowledge, awareness and OCB, are integral factors to develop green EB in hospitality sector (Robin *et al.*, 2017).

Employee customer oriented OCB indicates extra friendly behaviour, unconditional and concerned with the well-being of the customer (Bashirun, 2019). This sort of discretionary behaviour is being highly appreciated in the hospitality sector for improving the service quality of the hotel firm (Wu et al., 2013). Hotel administration associates quality of customer service with the success of their enterprises and also understands that employee extra-role behaviour adds value to the service quality (Dimitriadis, 2007). The theory of OCB and previous research recommends the relationship between employee discretionary behaviour and EB. This relationship contributes in understanding the employee EB backed by customer oriented OCB (Bashirun, 2019). The association of customer oriented OCB with environmental practices exists; however, its mediating impact is yet less explored. Therefore, this study assumed that:

#### **H7:** Customer oriented OCB mediates the relationships between EC and EB

EC refers to employees' behavioural intentions pertaining to green issues that may cause potential loss to the hotel enterprise (Kim & Hall, 2020), whereas OC is referred to employee emotional attachment with the organisation (Allen & Meyer, 1990). EC is associated with green issues having a large impact on enterprises and customers located in that community (Kim & Hall, 2020), and employees' OC only stir their disposition to exert extra effort beyond their obligations for their organisation (Arumi et al., 2019). This relationship has been discussed in different perspectives. EC has been considered in connection with environmental attitudes, with the understanding to examine its effect on EB (Okumus *et al.*, 2019), whereas employee OC was inspected to explore its impact on ES and OCB with the ultimate objective for improving organisational performance (Arumi et al., 2019). Employee and organisation, both combine in a holistic framework that encourages normative commitment and a pro-environmental EB (Miroshkin et al., 2019). Employee EC is a substantial environmental

attitude that promotes work attitude (i.e. OC) at the workplace which is an integral factor for demonstrating EB (Miroshkin et al., 2019). Employee involvement plays a significant role in strengthening the relationship between environmental attitudes and EB (Zientara & Zamojska, 2018). This discussion proposes:

**H8:** OC mediates the relationships between EC and EB.

Despite the growing concern of environmental issues, and its potential impact, very few studies have explored the role of employees' environmental attitudes predicting EB (Chan *et al.*, 2017). The dominant theme of environmental research remained the adoption of an environmental management system (EMS) (Chan *et al.*, 2017), marketing of green products (Dief & Font, 2010), and the significance of EMS and customer perception of green restaurants etc. (Chan *et al.*, 2017). Research on the willingness of employees in execution of green environmental practices yet requires further deliberation (Miroshkin et al., 2019). Previous research recommends that providing green opportunities through employee involvement motivate the employee to contribute and initiate new ideas for ecological practices (Masri & Jaaron, 2017), help them to implement environmental strategies and develop a valuable environmental management system (Boiral & Paillé, 2012). TPB suggests that employee demonstrates more discretionary behaviour to the customers and organisation, and also extends their level of commitment when they believe the organisation is taking interest in sustainable environmental initiatives (Ebeh *et al.*, 2017).

The individual mediating impact of customer oriented OCB and OC in the previous studies have been discussed in the context of organisational performance, role leadership and job satisfaction (Boiral & Paillé, 2012). In the hospitality sector, the mediation of employee discretionary behaviour and commitment have been observed in the background of employee turnover intention (Rashid *et al.*, 2018), impact of intrinsic motivation and leadership behaviour (Kim *et al.*, 2020). Customer oriented OCB is not explicitly recognised by formal reward but contributes to an effective environmental system and OC is willingness to exert considerable effort on the part of the organization, greening the hospitality sector (Ebeh *et al.*, 2017). Existing literature deliberated less on the sequential mediating impact of customer oriented OCB and OC on the association between environmental attitudes and ecological practices.

**H9:** Customer oriented OCB and OC mediates the relationships between EC and EB

The framework presented is developed on the basis of literature review in line with the concept of TPB. The logically developed proposed theoretical model presents the study variables (i.e. EC, customer oriented OCB, OC, ES and EB and the pattern of relationship among them (Figure 1).

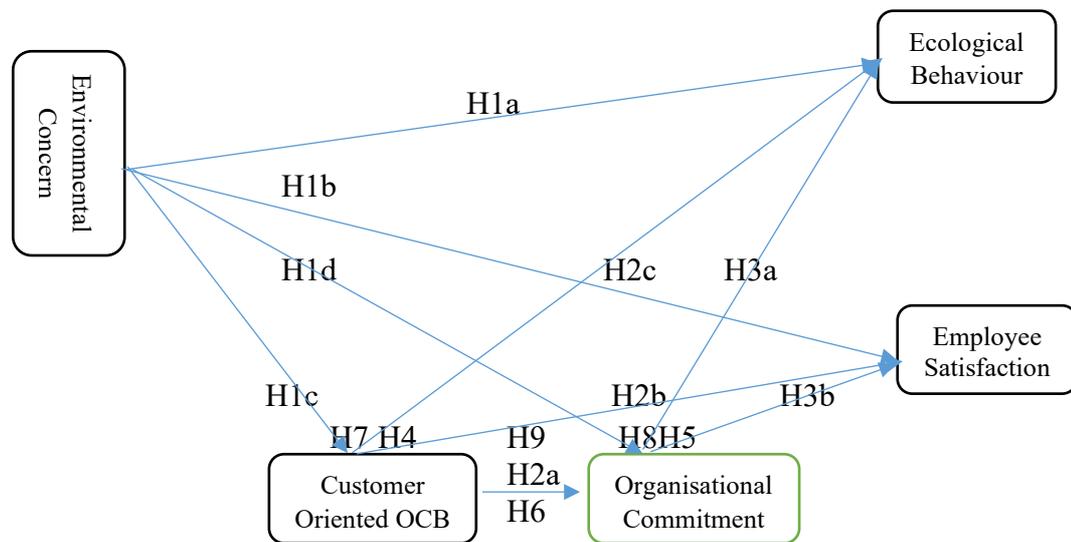


Figure 1: Environmental Attitude and Behavioural Model

## METHODOLOGY

### Sample and procedure

The data was collected for this cross-sectional study from 508 managerial and supporting staff, selected on convenient sampling basis, of the hotel industry having at least one-year experience, through questionnaires survey T1 (demographic variables, employee EC, customer oriented OCB and OC) and T2 (ES & EB), by following the suggestions of Podsakoff et al. (2003) and Bryman & Bell, (2018) to avoid common method bias. The units of analysis for this study were the individuals as the respondents of our study. Out of 700 survey questionnaires (T1) distributed in 70 organisations, 588 were returned, to whom after two weeks T2 survey questionnaires were served and 545 questionnaires were returned, giving a response rate of 78%. Out 545 survey questionnaires, 508 (response rate 72%) useable survey questionnaires were selected and recorded in SPSS 24 for data analysis.

### Measures

All the constructs in the questionnaire were measured using pre-tested scales. The survey questionnaires (T1 & T2) consisted of five Point-Likert scales questions items ranging from 1 (strongly disagree) to 5 (Strongly agree). The study variables, their references, sample items and internal consistency reliability are presented as under (Table 1):

**Table 1:** Study variables, Reliability, Sample items, References

S.N	Study variables	No. Items	Sample items	Reliability	References
1	EC	7	hoteliers should be required to use recycled materials in their operations whenever possible	0.85	Minton & Rose (1997)
2	CUOOCB	8	to serve my customers, I volunteer for things that are not required	0.76	Dimitriades (2007)
3	OC	6	I am proud to tell others that I am part of this organisation	0.81	Meyer et al., (1993)
4	ES	3	all in all, I am satisfied with my job	0.79	Cammann et al., (1983)
5	EB	7	I reuse my shopping bags	0.85	Kilbourne & Pickett. (2008)

Note: EC: environmental concern, CUOOCB: customer oriented OCB, OC: organisational commitment, ES: employee satisfaction, EB: ecological behaviour

## DATA ANALYSIS

### Measurement Validation

Prior to assessing convergent and discriminant validity through CFA, model fit indices were evaluated for our measurement model and alternate models. Initially, the full five factor measurement model was examined. We draw all our question items of our five study variables in AMOS 24 and then permitted the items to correlate liberally on to their respective factors. The results of our hypothesised five factor model (EC, customer oriented OCB, OC, ES, EB) was plausibly depicting our good fit (Table 2) as Incremental Fit Index (IFI) =0.96, Normed Fit Index (NFI) =0.97, Relative Fit Index (RFI) =0.94, Tucker-Lewis Index (TLI) =0.93, Confirmatory Fit Index (CFI) =0.98 and Root Mean Square Error of Approximation (RMSEA) =0.06. All of these indices fall into fit the satisfactory limit: TLI>0.90 (Kline, 2015), IFI>0.90, CFI>0.90 and RMSEA <0.08 (Holmes-Smith, 2000).

The full (five-factor) measurement model was also compared with the alternate nested models in order to find a best fit model to our data. The results show that our five-factor model presents a best fit to our data and none of the alternate nested models provided an acceptable model fit at  $p < 0.001$ . Thus, the results provided support for the idea that EC, customer oriented OCB, OC, ES and EB are distinct constructs (Table 2).

**Table 2** Confirmatory Factor Analysis

Models	IFI	NFI	RFI	CFI	TLI	RMSEA
Five factor Model	0.96	0.97	0.94	0.98	0.93	0.06
Four Factor Model	0.84	0.82	0.75	0.82	0.81	0.07
Three Factor Model	0.80	0.75	0.71	0.74	0.72	0.07
Two Factor Model	0.74	0.71	0.62	0.71	0.69	0.08
One Factor Model	0.71	0.65	0.58	0.64	0.61	

*Five Factor Model:* All the Factors Individually; *Four Factor Model:* EC and Customer Oriented OCB combine into one factor; *Three Factor Model:* EC and OC combine into one factor, ES and EB combine into one factor; *Two Factor Model:* EC, Customer Oriented and ES combine into one factor. OC and EB combine into one facto ; *One Factor Model:* All the variable combine into one factor

### Correlation Matrix

The results reveal that the employee's EC is positively and significantly associated with ES ( $r=0.49, p<0.001$ ) and EB ( $r=0.50, p<0.01$ ). Results show that EC has positive effect on customer oriented OCB ( $r=0.50, P<0.01$ ) and OC ( $r=0.77, p<0.01$ ). Overall, the results also explore significant effects of education on employees EC ( $r=0.15, p<0.001$ ), customer oriented OCB ( $r=0.09, p<0.05$ ), OC ( $r=0.09, p<0.05$  and EB ( $r=0.13, p<0.01$ ) (Table 3), which indicates highly educated employees demonstrate more responsibility and commitment towards the organisation and implementation of green practices. Results further explore the significant negative effect of job type on ES ( $r=-0.12, p<0.01$ ), which shows that supporting staff was less satisfied with the organisation.

**Table 3.** Means, Standard Deviation and Correlations for the Study Variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Gender	1.22	.42	-										
2. Age	2.30	.81	-.04	-									
3. Education	2.31	1.08	.30**	.32**	-								
4. Job Type	1.77	.42	.17**	-.30**	-.28**	-							
5. Tenure	1.62	.86	-.22	.48**	.09	-.36**	-						
6. Marital Status	1.53	.50	-.11*	.37**	.13**	-.12**	.25**	-					
7. EC	4.00	.54	.13**	.03	.15**	-.01	.01	.00	<b>(.85)</b>				
8. CUOOCB	4.16	.50	.04	.01	.09*	-.01	.03	.05	.50**	<b>(.76)</b>			
9. OC	4.07	.55	.10*	.03	.09*	-.01	.03	.00	.77**	.56**	<b>(.81)</b>		
10. ES	4.14	.61	-.07	.06	.08	-.12**	.06	.06	.51**	.33**	.49**	<b>(.79)</b>	
11. EB	3.97	.61	.13**	-.01	.13**	.01	-.03	-.03	.57**	.48**	.50**	.36**	<b>(.85)</b>

**Note:** EC: environmental concern, CUOOCB: Customer oriented OCB, OC: organisational commitment, ES: employee satisfaction, EB: ecological behaviour, Extraction Method:

Principal Component Analysis (n=508). Rotation Method: Varimax with Kaiser Normalisation. Factor loadings<0.40 are suppressed.

The discriminant / divergent validity was calculated by following Fornell and Larcker (1981) approach which asserted the square root of AVE of each construct that should be greater than the correlations of this construct to all the other constructs. The square root of AVE in bold and diagonal elements is greater than .69, which followed the suggestion of Hair et al., (2016). All diagonal values were greater than inter-construct correlations values for EC  $\sqrt{AVE}=.77>.50$ , .76, .51, .57. Moreover, all variables have CR and AVE greater than .70 and .50 respectively. Thus, fulfilling the criterion of for convergent validity. So, the criterion for both convergents as well as discriminant validity is supported.

**Table 4:** Convergent and discriminant validity

#	Constructs	Convergent Validity		MSV	Discriminant validity					
		CR	AVE		1	2	3	4	5	
1	EC	.82	.59	.46	<b>.77</b>					
2	Customer Oriented OCB	.79	.63	.38	.50**	<b>.79</b>				
3	OC	.86	.51	.49	.76**	.56**	<b>.71</b>			
4	ES	.77	.52	.47	.51**	.33**	.49**	<b>.69</b>		
5	EB	.85	.55	.57	.57**	.48**	.50**	.36**	<b>.74</b>	

## RESULTS

### Direct influence

The results indicate employee EC positively significantly influences EB ( $\beta=.45^{**}$ ,  $P<.05$ ), ES ( $\beta=.38^{**}$ ,  $P<.05$ ), customer oriented OCB ( $\beta=.46^{**}$ ,  $P<.05$ ) and OC ( $\beta=.65^{**}$ ,  $P<.05$ ), thus supporting H1a, H1b, H1c and H1d respectively (Table 5). The outcomes also explain that employee customer oriented OCB affect their OC ( $\beta=.25^{**}$ ,  $P<.05$ ), EB ( $\beta=.29^{**}$ ,  $P<.05$ ) but do not influence the ES ( $\beta=.06$ ,  $P<.05$ ), consequently supporting H2a, and H2c (Table 4.4). However, H2b is rejected as there is no impact of employee customer OCB on ES. Similarly, employee OC stimulates ES ( $\beta=.65^{**}$ ,  $P<.05$ ) and EB ( $\beta=.65^{**}$ ,  $P<.05$ ) (Table 5).

**Table 5: Hypotheses Testing and Path Coefficient (Direct Influences)**

Hypothesis	Structural Path	Path Coefficients	Conclusion
H1a	EC → EB	.45**	Supported
H1b	EC → ES	.38**	Supported
H1c	EC → CUOOCB	.46**	Supported
H1d	EC → OC	.65**	Supported
H2a	CUOOCB → OC	.26**	Supported
H2b	CUOOCB → ES	.06(N.S)	Not Supported
H2c	CUOOCB → EB	.29**	Supported
H3a	OC → ES	.23**	Supported
H3b	OC → EB	.06**	Supported

**Note:** EC: environmental concern, CUOOCB: Customer oriented OCB, OC: organisational commitment, ES: employee satisfaction, EB: ecological behaviour; direct influence is significant at the  $p=0.05$  level

### Indirect influence

The results indicate an indirect influence of EC on ES ( $\beta=.03^{***}$ ,  $P<.05$ ) and EB ( $\beta=.13^{***}$ ,  $P<.05$ ) through OC and customer oriented OCB, thus supporting H5 and H7. The indirect impacts of employee EC on EC ( $\beta=.03$ ,  $P<.05$ ) and EB ( $\beta=.04$ ,  $P<.05$ ) through customer oriented OCB and OC is insignificant, thus rejecting H4 and H8 (Table 6). The results of mediating impacts of employee EC on ES and EB through customer oriented OCB and OC partially approves the stance of previous research (Pham *et al.*, 2019).

**Table 6: Hypotheses Testing and Path Coefficient (Indirect Influences)**

Hypothesis	Structural Path	Path Coefficient	Conclusion
H4	EC → CUOOCB → ES	.03	Not Supported
H5	EC → OC → ES	.03***	Supported
H7	EC → CUOOCB → EB	.13***	Supported
H8	EC → OC → EB	.04	Supported

**Note:** EC: environmental concern, CUOOCB: Customer oriented OCB, OC: organisational commitment, ES: employee satisfaction, EB: ecological behaviour; indirect impact is significant at the 0.05 level.

### Interactive influence

The results of sequential (interactive) mediation analysis of EC on ES ( $\beta=.15^{***}$ ,  $P<.05$ ) through customer oriented OCB and OC is significantly positive. The impact of sequential mediation of employee customer oriented OCB and OC in the relationship of employee EC and EB, however, is insignificant (H9:  $\beta=.01$ ,  $P<.05$ ) (Table7). The positive association between employee EC and EB ( $\beta=.45^{**}$ ,  $P<.05$ ) had already been tested positive in this study (Table 4) and previous studies (Chan *et al.*, 2017). The sequential mediation findings are partially supporting the stance of previous studies (Kim *et al.*, 2019; Okumus *et al.*, 2019; Pham *et al.*, 2019).

**Table 7:** Hypotheses Testing and Path Coefficient (Interactive Influences)

Hypothesis	Structural Path	Path Coefficient	Conclusion
H6	EC → CUOOCBB → OC → ES	.15 ***	Supported
H9	EC → CUOOCB → OC → EB	.01	Not Supported

*Note:* EC: environmental concern, CUOOCB: Customer oriented OCB, OC: organisational commitment, ES: employee satisfaction, EB: ecological behaviour; interactive effect is significant at 0.05 level.

## DISCUSSION AND CONCLUSION

The study, following the suggestions of previous studies (Kim *et al.*, 2019; Okumus *et al.*, 2019; Pham *et al.*, 2019), was designed to examine the contribution of employees in the context of greening the hospitality sector. The indirect influence of employee customer oriented OCB and OC was empirically tested in the relationship of environmental attitudes and EB in the line of Ajzen's (1991) TPB. Our study results of hypothesised statements were partially validated and approved the stance of previous studies.

### Theoretical Contribution

The present study broadens the frontiers of research on EB and employee job attitudes in the context of implementing green practices in the hospitality sector, and provides a framework for understanding how EB and ES are stimulated by the employee environmental attitudes. The results of this study adds to the literature of the hospitality sector by developing understanding how positive emotions (OCB and OC) promote the EB by generating a positive approach towards customers and satisfying them with their work and life conditions. This study applied

the assumptions of TPB (Ajzen, 1991) as a theoretical foundation for assessing the impact of environmental attitudes on EB and ES through employee customer oriented OCB and OC. The customer oriented emotions and the result enhanced the cognitive and behavioural approaches to promote the development of OC (Kim *et al.*, 2019). The findings explore the association of employee environmental attitudes and employee job attitudes to implement green practices in the hospitality sector.

### **Practical Contribution**

This research has several implications for managers and practitioners of hospitality sector seeking to cultivate and sustain the EB and contentment of their employees. First, hotel employees may be aware of the importance of green practices, but they do not often practice EB. Organisations should consider making significant investments in human capital with the view of enhancing employee discretionary behaviour, commitment and level of satisfaction rather than a greater emphasis on increasing in their productivity. Employee environmental attitudes are linked to the employee job attitudes and EB, therefore, firms should make sincere efforts to promote optimal employee environmental awareness, concern and knowledge to implement green practices. Human resource managers should carefully recruit individuals who are highly environmentally concerned, having discretionary behaviour, being enthusiastic, committed and exhibiting an overall positive approach even in adverse and stressful conditions. We recommend that managers focus on fostering employee environmental attitudes by encouraging them to behave discretionally and to show commitment even when they encounter negative situations. We also recommend enhancing social functioning and building strong ties between employees and managers by arranging social events. The results highlight the positive impact of employee job attitudes on employee EB and job satisfaction. To promote this culture, supervisors on a regulatory basis might monitor aimed at regulating employee attitudes when employees at the workplace are interacting with customers in rush hours, start giving higher preference to other-orientation over self-orientation and their helping behaviour starts diverting their focus from personal growth, job duties and objective attainment towards others 'goals.

### **RESEARCH LIMITATIONS AND FUTURE RECOMMENDATIONS**

Every research has limitations; this investigation also suffers from limitations that relate to the sampling, the research tool, and the data analysis techniques. First, the research sample was taken from the hospitality sector of the Punjab province Pakistan which can be further evaluated in future to other provinces but mainly Northern Areas. Second, the sample is selected from Pakistan, which is under-developing, therefore, results of the research counted in a developed country may be different due to their economies and infrastructure (Laleman *et al.*, 2015). In future a cross-cultural research study, particularly among developing and developed countries could give insight to see the difference related to the predictive EB of employees of the hospitality sectors serving in different hospitality sectors based on different cultures and economies.

Third, this study used a self-reporting survey questionnaire for data collection to measure the variables based on perception of employees serving in the hotel industry. The other data collection techniques, including direct observations or conducting questioned structured interviews even experimental design and longitudinal study could have been better chosen. These may artificially inflate or deflate the association between study variables. Future research could adopt other research methodologies' techniques including qualitative or mixed methodology to predict the ES and EB. Fourth, this research is conducted in a non-Western context (i.e., Pakistan). Therefore, this could create a generalisation problem since differences in the working context and culture in Pakistan is distinct from Western countries (Laleman et al., 2015). Fourth, the majority of the respondents of this research study were male employees (i.e., 77.8 %) of the hospitality sector which may raise the concerns about the generalisability of findings for both genders. In a future study it could be empirically tested with the female dominance sample. Fifth, we controlled employee age, gender, marital status, educational level, job type, and work experience in order to avoid confounding effects on observed relationships. Future studies may add these different demographics of employees to observe the impact on the prediction of employee EB towards environmental problems. We only concentrated on employee EC but there is a room for other factors including environmental awareness, knowledge and intent that can affect employee EB in the presence of employee job attitudes

**FUNDING:** This research received no external funding.

**CONFLICTS OF INTEREST:** The authors declare no conflicts of interest.

**ETHICAL STATEMENT:** All procedures performed in study ensured that human participants' involvement in the research was in accordance with the ethical standards of the institution and/or national research committee and with the 1975 Declaration of Helsinki and its later amendments or comparable ethical standards. The protocol was approved by the Ethics Committee of the School of Business Administration, National College of Business Administration and Economics, Lahore. Informed consent was obtained from all individual participants included in this study.

**ACKNOWLEDGMENT:** This piece of work would not have been promising without the guidance and help of several individuals who, in one or other way, have contributed and extended their valuable assistance for the success of this study.

I am thankful to Dr. Alia Ahmed, Dean, School of Business Administration, National College of Business Administration and Economics, Lahore, for assistance and comments that greatly improved the manuscript.



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