



DETERMINING THE INFLUENCE OF GREEN TRANSFORMATIONAL LEADERSHIP, GREEN INNOVATION AND GREEN HRM PRACTICES ON ENVIRONMENTAL PERFORMANCE OF HOSPITALITY INDUSTRY OF PAKISTAN: A MODERATING ROLE OF INDIVIDUAL EMPLOYEE BEHAVIOUR UNDER COVID-19

Aneeta Rehman¹, Dr Muhammad Shahid Yaqub²

- i. Ph. D Scholar, Department of Management sciences, The Islamia university of Bahawalpur. Email: anitarehman0@gmail.com
- ii. Assistant Professor, Department of Management sciences, The Islamia university of Bahawalpur. Email: shahid.yaqub@iub.edu.pk

ABSTRACT

The current study aims to investigate the environmental performance of hospitality industry of Pakistan based on green practices. The environmental concerns have become point of focus due to global warming issues so therefore greening aspect has gained importance in operational perspective. The study intends to examine the influence of green transformational leadership, green innovation and green human resource practices on environmental performance. The study is unique in determining the effect of individual employee behaviour under covid-19 as study was conducted during pandemic as it considered as most destructive situation for hospitality industry. The study was quantitative in nature and data was collected from hotels of Pakistan through questionnaires. The collected data was analysed on Smart-PLS through measurement model and structural equation modelling. The collected data was analysed through Smart-PLs and found interesting results that green transformational leadership, green innovation and green human resource management practices has unique influence on environmental performance. The results depicted that green transformation leadership and green innovation found to be significant, but green human resource practices observed as insignificant. Furthermore, no moderation was reported by individual employee behaviour under covid-19 in hypotheses H5 and H6 but H7 found to be statistically significant. The findings of the study are crucial for hotel industry to develop strategies towards environmental concerns while focusing on greening aspect of operational perspective.

Keywords: Green transformational leadership, Green innovation, Green human resource management practices, environmental performance, individual employee behaviour under covid-19

Introduction

Historically, the global businesses are being influenced through several indicators directly such as unstable politics, unbalanced economic conditions, uneven demographics, patchy socio-cultural activities and uncontrolled inventions of technologies. Through such factors the level of changes into the performance of business is retained within a cluster or in a region specifically. Though, recently, a new novel coronavirus (COVID-19) introduced an unaware environment not only to one region but worldwide. This has a global reach with unpredictable consequences and the vaccine is still unavailable. Nevertheless, Covid-19 is a

pandemic which is uncontrollable by the borders whereas other external elements are partly controllable comparatively. The influence of this pandemic is a huge setback to the economies, societies and political systems globally (Fernandes, 2020). The most suffered industry is the hospitality and tourism which links more than 50 other sectors in order to contribute in the economy of a country; the suffering of tourism industry cannot be neglected by the world. The researchers are collectively framing a literature by arguing the Covid -19 will be shaped soon as a strong external factor to be considered in tourism industry and it will provoke the businesses to revise the patterns of operations. Correspondingly, the previous literature supported the relationship of pandemics with tourism such as Page, Yeoman, Munro, Connell, & Walker, (2006) organized the practices to deal with an influenza pandemic in Scotland, Kuo, Chen, Tseng, Ju, & Huang, (2008) mentioned the new demanding factors to the international tourism due to SARS globally, later the impact of swine flu explained in UK (Page et al., 2006). Afterwards; the study conducted about the crisis in Gambia due to Ebola disease (Novelli, Burgess, Jones, & Ritchie, 2018). Therefore, the tourism scholars have the arguments over this new disease outbreak around the globe; they are effectively endeavouring to convince the world through useful suggestions to recover the tourism industry. The World Tourism Organisation has altered that the Covid-19 is a massive hit to the tourism globally and it could lead to a loss of 300\$-500\$ billion in tourism worldwide.

The tourism industry is extremely concentrated in order to utilize of energy, water, and perishable commodities but for the viable discharge of toxic emissions into the air, soil, and water in daily operations (Ashraf, Hou, Kim, Ahmad, & Ashraf, 2020). The tourism industry has been blamed for an environmental imbalance issues and warranted to set their policies and actions under a scientific mode of community. Conspicuously, the hotel industry has been held responsible for the environmental performance right after an unaware outbreak in a particular region or country. Somehow, the hotels have begun to utilize the biodiversity practices, green practices and partial motivational implications for achieving the standard of environmental performance (Melissen, van Ginneken, & Wood, 2016).

The literature has explored the strong relationship of a persistent environmental performance in hotel industry, due to implementation of multiple green regulatory factors. In this impulsively growing scenario, the environmental deterioration is an inevitable challenge and becoming a corporate matter to be consider specifically in hotel domain (Kularatne, Wilson, Månsson, Hoang, & Lee, 2019). Thus, the environmental management system requires improvising the policies to restrict the cost increase, wastage of natural recourses and skip the non environmental activities around them in line to sustain demand of tourists (Alameeri, Ajmal, Hussain, & Helo, 2018).

The implementation of green innovation in the hotel emphasizes the impact of environmental performance. The introduction of technological innovation factors can balance the ecological performance through the improving the routine operations and particularly by saving the cost. The green innovation tackles the pressure of tumultuous and aggressive marketplace (Hornig, Liu, Chou, Tsai, & Chung, 2017). Hence, green innovation would be an essential element to enhance the ecological performance. The literature stressed to imply the transformational leaders to get a clear vision associated to new challenges and future line of actions under such dynamic world's markets. The leadership must support innovative vision and concrete believe in communication among employees predominantly in hotel domain. Zhu, Avolio, & Walumbwa, (2009) pointed out green transformational leadership (GTFL) as a high impact practice to boost the organizational performance through commitment, trust and motivation. The studies have indicated the positively unique impact of the transformational leadership over organizational management, performance, and employee commitment (Jia, Chen, Mei, & Wu, 2018; W. Zhu, Riggio, Avolio, & Sosik, 2011). The negation of green human resource

practices would be a severe challenge for an organization in line to enhance the ecological performance and the sustainability the business. The GHRM practices are the incomparable booster for the environmental performance with positive ecological outcomes (Paillé, Chen, Boiral, & Jin, 2014; Roscoe, Subramanian, Jabbour, & Chong, 2019; Wagner, 2013). The researchers have revealed the positive impact of GHRM practices over a firm's environmental performance (EP). A literary link between EP and GHRM practices has been established, but this study investigates the influence of GHRM in the presence of environmental values under Covid-19.

Aligned with that, World Health Organization, (2020) clearly mentioned that the ecological predictors have been challenged globally, the revision in strategies and policies is a fundamental necessity for the sustainability of the each sector in this world. According to Bartik et al., (2020), forty three percent businesses have been vanished due to the abrupt change in the environmental values of businesses because the individual employee values are considered more valued and worth-taking due to the preventive conditions of covid-19. In this context, the role of environmental values in order to establishing the relationship between transformational leadership, green innovation and green human resource management and environmental performance is under researched. Aligned with this, Baum & Hai, (2020) stressed on the closure of hospitality and tourism industry due to the blockage of human trafficking and log jam of economies around the globe. The Baum & Hai, (2020) is one of the first scholar who identify the obstacle in the environmental performance of the business in tourism industry because this corona virus replicate human to human. Therefore; this study is the most relevant investigation to address the ecological challenges of tourism industry in this unpredictable pandemic. Furthermore, this study contributes in the explaining the subsequent influence of green innovation, transformational leadership and green HRM practices on environmental performance in tourist hotels of Pakistan.

The research model is underpinned by resource-based view (RBV) and ability-motivation-opportunity (AMO) theoretical lenses to examine and explained the relationship of green transformational leadership, green innovation, green HRM practices and environmental performance (Fotopoulos & Psomas, 2009). The RBV presents a guiding scheme for improved influence and the AMO theory to understand, predict and control employee's behaviour in the organization (Takeuchi, Lepak, Wang, & Takeuchi, 2007).

This study examines the role of green transformational leadership toward influencing green organizational identity and its subsequent impact on green creativity in tourist hotels. The study further tries to establish the moderating role of individual environmental values between the predictors of environmental performance. The study adjoins to the literature in the subsequent ways: foremost, a noteworthy relation between environmental performances, green transformational leadership, green innovation and green HRM practices is established. Afterwards, the role environmental values of covid-19 as a moderator offer an improved understanding of environment in tourist hotels. Consequently, we examined the extent to which green organizational predictors and environmental values affect ecological performance of the tourist hotels by dealing with covid-19. Hence, there is an imperative need to endorse workably effective influencers among the independent industries to construct relationship with tourists and cultivate hotel's protective environment to recover the massive damage of covid-19.

Literature Review and Hypothesis development

Overview of tourism as business industry in Pakistan

In this contemporary mode of businesses, tourism is categorized as a service-oriented business with a well-built multiplier effect on several sectors like manufacturing, construction, agriculture, commerce. It instigates with chronological natural views, entertainment facilities, stunning places, historical information, familiarity and popularity,

and programs interrelated to tourism with the government support. This adds on a significant ratio into the development of any economy through reflecting the cultural norms and diversification of different places (Dragoş & Ravar, 2012). According to Nunkoo, Seetanah, Jaffur, Moraghen, & Sannasee, (2020) travel and tourism industry generates 392 million jobs globally and insert 11.2 percent to GDP around the globe.

Pakistan is a prosperous country in natural resources, scenic beauty, historical places, sub continental foods, and diversify cultures. The tourism sector is under famed in Pakistan due to multiple reasons such as lack of investment in historical places, the least interest of government, out dated entertainment, less accommodation and low level of promotion internationally (Arshad, Iqbal, & Shahbaz, 2018). Despite of all these challenges, Pakistan has engrossed 2 million international tourists in 2017, whereas Malaysia 26 million, China 60 million, Thailand 35.5 million and Turkey 37 million with majority plans of promotions globally (Muhammad et al., 2019). Though the tourism contributes in the GDP of Pakistan was 7.1% in 2018. The four type travellers are attracted religiously such as Muslims, Sikhsim, Hindus and Baddish. Several pious places and historical building associated with different religions are maintained in multiple cities of Pakistan (Arshad et al., 2018). A range of Islamic shrines of Sufis and saints, the birth and worship place of baba Guru Nanak founder of the Sikh religion, Takht-i-Bahi, Mingora ,Araya Temple, Shiva Temple, Katasraj temple are prominent places for Hindus, the Taxila is a historically epic centre of learning Gandhara for Buddhism (Malik, Chaudhry, Sheikh, & Farooqi, 2010). In the beginning of 2019, the Forbes magazine issued an article revealing Pakistan as ultimate adventure destination. In contrary, the outbreak of pandemic covid-2019 has imposed quarantine in many countries, the air travel bans, entry bans and other restrictions for the citizens or travellers are obligatory. The willingness of travelling is decreased collectively due to the negative impact of outbreak in different regions. Therefore, the tourism has taken a big hit worldwide. The World Tourism Organisation has altered that the Covid-19 is a massive hit to the tourism globally and it could lead to a loss of 300\$-500\$ billion in tourism worldwide.

Green Transformational Leadership, Green Innovation, Green HRM and Environmental Performance

The organizational performance is keenly associated with the characteristics of leader and the leadership has a vital role in boosting the environmental performance (Cheung & Wong, 2011; Halbesleben, Novicevic, Harvey, & Buckley, 2003). The existing literature pointed out the transformational leadership is a fundamental element in achieving the organizational outcomes (Buil, Martínez, & Matute, 2019; Choudhary, Akhtar, & Zaheer, 2013; Noruzy, Dalfard, Azhdari, Nazari-Shirkouhi, & Rezazadeh, 2013). In line with this study, the green transformational leadership (GTFL) define as a leader with a clear vision, charisma, individual inspirations, motivation and unconditional support to employees towards gaining the set environmental goals (Mittal & Dhar, 2016). The GTFL encourage the employees to add new innovative strategies which can impact positively in operations of an organization and the leader invests in green procedure related activities and to enhance the ecological performance of the business (Dranev, Izosimova, & Meissner, 2018; Soto-Acosta, Popa, & Martinez-Conesa, 2018). The GTFL is recently emerged through empirically investigated with the environmental performance as existing literature shows a significant impact over employee behaviour, organizational development, green performance, product innovation and service innovation and external environmental factors of a firm (Cheung & Wong, 2011; Halbesleben et al., 2003). In other hand, a range of studies have the inconsistent findings between the green transformational leadership and environmental performance (Hoch, Bommer, Dulebohn, & Wu, 2018; Yang, Liu, & Gu, 2017). In the context of tourism industry, the previous literature is keeping a clear contradiction. Therefore; we hypothesized that:

H1: Green Transformational Leadership positively influences Environmental Performance

The environmental performance associated with the process, product and natural resources occupied by the organization with legal rules and regulations. The existing literature pointed the factors which influence the ecological performance such as green product, process and green innovative administration operations with friendly environmental products (Dubey, Sonwaney, Aital, Venkatesh, & Ali, 2015; Oliva et al., 2019). According to Dubey et al., (2015) the green innovation decreases the negative influence of through reducing the cost and wastage by introducing the green product and process to enhance the environmental performance. The green innovation is considered as a proactive element to attain the ecological distinctive performance with a positive impact that investigated in few recent studies (Kratzer et al., 2017; Lin, Tang, & Geng, 2013). According to the empirical investigation of Chen, (2008) the green innovation affect the competitive advantage but not the environmental performance. Although, Hayami, Nakamura, & Nakamura, (2015); Javaid, (2017) ;Q. Zhu, Sarkis, & Lai, (2012) supported green supplies and green administration to get the environmental goals, so, they did not explicitly engage the link between environmental performance and green innovation. Therefore, following hypothesis is proposed:

H2: Green Innovation positively influences Environmental Performance

A few studies explained the environmental performance such as a commitment to shelter the environment with the present parameters and limits to control the operations of a firm (Paillé et al., 2014). Several studies investigated the positive association of green human resources management with the proactive environmental activities (Arda, Bayraktar, & Tatoglu, 2019; Goswami & Ranjan, 2015; Paillé et al., 2014). The behaviour of employees, role of managers, recruitment procedures, trainings and development, involvement of employees and the potential interest of top management are the identified priority to attain the competitive level of environmental performance (Bangwal & Tiwari, 2015; Chiou, Chan, Lettice, & Chung, 2011). According to Simpson & Samson, (2010) the GHRM included the training of staff which helps to reduce the overuse of resources , wastage and pollution. GHRM is centred with environmental consciousness which guides to increases the employee skills in eliminating process and material waste and improves the employee involvement in achieving the EP of the organization. This era refers as an environmental awareness management and linked with the green practices to influence the green employee behaviour and environmental strategies. The GHRM practices works with the environmental system to execute the environmental standards of an organization. This study argues the effectiveness of GHRM practices specifically to control the harmful factors of an organization and connects the HRM with ecological activities. The top management requires promoting the green practices among employees and trained them to protect the environment by reducing pollution in the organization (Masri & Jaaron, 2017). The ecological goals of an organization are interlinked and interconnected with the green HRM practices such as training, selection, recruitment, appraisals, evolution, rewards and recognition (Jabbour, Jabbour, Teixeira, & Freitas, 2012). Therefore, the following hypothesis is proposed:

H3: Green Human Resource Management Practices positively influences Environmental Performance

Individual Employee Behaviour under Covid-19 and Environmental Performance

The environmental values are the combination of personal norms, individual believes and behaviours of employees. The individual employee behaviour is also stated as environmental vales of employees. The individual values of an employee have a significant impact in organizational performance (Croson, Schultz, Siemsen, & Yeo, 2013). The existing literature has established a relationship with the organizational performance specifically in servicing sector (Croson et al., 2013; Stern, Dietz, Abel, Guagnano, & Kalof, 1999; Wall & Berry,

2007). The individual values of employees need to be satisfied, trained and socially entitled with their responsibilities (Low, 2013). According to Roeck, Marique, Stinglhamber, & Swaen, (2014) the meaningful individual believes of employees at workplace creates a positive identity of organization with green optimal products and services. They reported further, the environmental performance is closely associated with employees work behaviour. Moreover, the employee's routine behaviour may different from work place behaviour due to many other barriers which consumes the positive energy of employees at work. Before this outbreak of Covid-19 the literature supported that each organization have several policies to train the workers and set up the attitudes according to the demands of an organization in their HRM department through certain programs. The World Health Organisation, (2020) issued a report having clear vision for further trainings of employees under a covid-19 pandemic, they mentioned personal values are more considerable, personal care, individual believes for the sake of safety of others are not exchangeable factor for organizations. Almost 5610 small business have been vanished only in USA and UK due to the untrained and mixed environmental values of employees at work. Therefore, an urgent investigation is required to ensure the role of personal values of employees in order to enhance the environmental performance of an organization. Hence, the following hypothesis is formed;

H4: Individual Employee Behaviour positively influences Environmental Performance

Moderating role of Individual Employee Behaviour under Covid-19 with GTFL, Green Innovation, and GHRM practices

The city of China, Wuhan was the triggered area of novel virus Covid in December 2019. It transferable only by human contraction even now reached to almost all the countries across world. Some countries have been able to treat it effectively rest are struggling due to lack of resources and the ambiguous symptoms of coronavirus. However, the WHO has declared it a global pandemic disease to high later the counties. According to recent researches, the tourism industry is the most affected among all the businesses. The human trafficking is blocked on all the borders even local movement is limited. In a recent report, on 2nd March,2020 has shown the six hard-hit countries; China, Korea, Italy, Japan, US, and Germany because they lost 55% of GDP, 60% manufacturing, and 23% of tourism. Similarly, Malaysia tolerated RM3.37 billion, India \$1.29 billion, China \$6.5 billion, Pakistan \$29.3billion, Singapore \$26.7 billion. As it is discussed above, Covid-19 would be an established external factor to affect the economies in a short time, the preventive measures refer to the individual norms and self isolation. The employee's individual behaviours is the core concern in this study that needs to be reconsidered by organizations to control the environmental impact of business. Hence, there is a clear gap in literature which needs to be investigated through revised conceptualization of environmental performance. This empirical investigation is a pioneer in Pakistan's tourism perspective with the improvised concepts of employee's individual behaviour as a moderator with GTFL, Green Innovation, and GHRM practices. According to Aboelmaged (2018) the hotel's environmental performance is closely associated with green HRM practices, ecological innovative procedures. In contract, some researchers identified the green practices as obstacles as they provoke the management to utilize more cost for achieving the environmental standard. In fact, 70 % hotels faced a setback of high consumption of resources due to the mixed individual behaviour, lack of leadership vision (Croson et al., 2013; Dubey et al., 2015; Oliva et al., 2019). On the other hand, employee individual behaviour is the outcome of green innovation which presents the simplicity at workplace. The Dumont et al., (2017) found significant contribution of employee's individual behaviour in the environmental performance when the policies, procedures and vision are clearly communicated by transformational leadership. So that the employees execute theirs part of work with a desired attitude and behaviour. Since, the

association of transformational leadership, green HRM, green innovation is reflected in literature, this study contributes in the body of literature a moderating role of employee's individual behaviour to influence the environmental performance of an organization. Therefore, the following hypotheses are proposed;

H5: *Individual Employee Behaviour moderates the influence of Green Transformational Leadership and Environmental Performance.*

H6: *Individual Employee Behaviour moderates the influence of Green Innovation and Environmental Performance.*

H7: *Individual Employee Behaviour moderates the influence of Green HRM practices and Environmental Performance.*

Research Framework

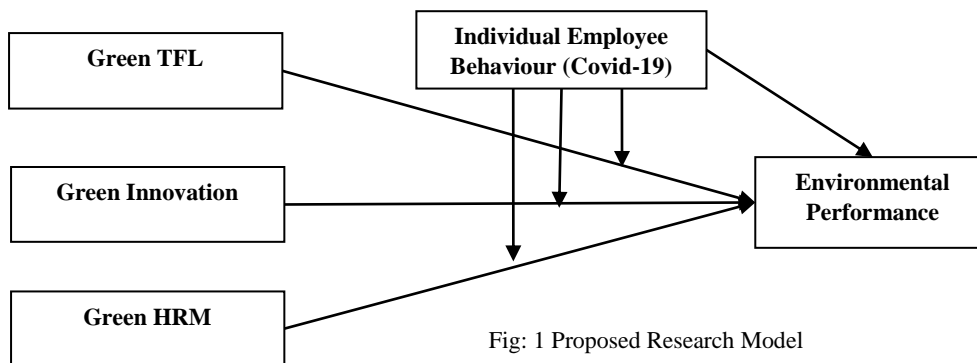


Fig: 1 Proposed Research Model

Research Methodology

The current study is quantitative in nature and cross-sectional; hence data was collected at once. Data collection was a real tough task due to Covid-19 lockdown and potential avoidance of hotel industry to respond and participate in research due to pandemic threat. The study was focused on environmental performance so therefore, hotel managers are most appropriate respondents for the data to be analysed. Generally, the hotels including Pearl Continental, Best Western, Sheraton, Rose Place, Marriott, Avani, Ramada, Grace, Serena and Carlton hotels in Islamabad, Lahore and Multan, but due to lock down and movement control during Covid19 it was not possible to collect data from large number of samples. The researcher applied convenience sampling techniques. For fetching the appropriate sample size “G*Power” calculator was utilized based on the predictors of the framework. The required minimum sample size was determined as 108 and study was required to collect data as much closer as 108 to meet the analysis requirement for determining the relationship (Muhammad, 2017). The total of 216 questionnaires were distributed for maximum response as due to covid19 it was hard to get response and reach the respondents, however researcher received 101 useable responses with great efforts by approaching through various references.

Measurement scale

The study adapted existing scales to measure the key variables by using multiple items on five Likert scale. The green transformational leadership measure adapted from applied a six-item scale developed by (Mittal & Dhar, 2016). The green innovation were measured with nine items (Chiou et al., 2011). The GHRM practices were measured by adapting measures from prior studies with twelve items Renwick, Redman, & Maguire, (2013) and Tang, Chen, Jiang, Paille, & Jia, (2018). The environmental performance was measured by six items adopted from Gollagher et al., (2010) and Papadopoulos & Giama,(2009). A self modified questionnaire was used to measure the employee individual behaviour with eight items (Chaudhary, 2020) and Hirst, Van Knippenberg, & Zhou, (2009).

Analysis and Results

The current phase entails the analysis portion which is an integral part of any empirical research. The Smart-PLS was utilized for analysis to fulfil the purpose of execute whole model at the same time. The prime concern of the study is to investigate the influence of green transformational leadership, green human resource practices and green innovation to determine the environmental performance. The study also intends to determine the moderation role of individual employee behaviour under covid-19; the argument is that moderating role will influence the relationship between exogenous and endogenous constructs.

The analysis phase of current study consists of two sections; the first section examines the reliability and validity of the constructs under measurement model through PLS algorithm. The second section of the study investigates the relationship between constructs of the framework through bootstrapping method of PLS.

Measurement Model Assessment

The current section of analysis consists of measurement model assessment, the measurement model assessment based on the reliability and validity of constructs based on collected data. The cronbach alpha and composite reliability is reported for constructs reliability and average variance extract (AVE) is examined for constructs validity.

The table 1 below demonstrates the reliability and validity analysis based on Cronbach alpha, composite reliability and average variance extracted (AVE); the value for Cronbach alpha and composite reliability must remain higher than 0.70 for acceptable reliability. The value for composite reliability must meet cut off point of 0.70. The AVE must be higher than 0.50 for acceptable validity (Hair Jr, Sarstedt, Hopkins & G. Kuppelwieser, 2014).

Table 1: Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
EP	0.807	0.860	0.527
GHR	0.917	0.929	0.521
GTFL	0.918	0.939	0.722
G_inno	0.930	0.941	0.642
IEB	0.909	0.927	0.619

The above table shows that Cronbach alpha was observed to be acceptable for all constructs; the Cronbach alpha for environmental performance was observed as 0.807, composite reliability was observed as 0.860 and AVE found to be 0.527. Therefore, it satisfied the all conditions for construct reliability and validity. Similarly, Cronbach alpha for all constructs green transformational leadership, green human resource, green innovation and individual employee behaviour 0.918, 0.917, 0.930 and 0.909 respectively. The composite reliability found to be 0.939, 0.929, 0.941 and 0.927 respectively. The convergent validity for all constructs was measured by AVE and observed to be 0.722, 0.521, 0.642 and 0.619 respectively.

Discriminant Validity

The discriminant validity determined by square root of AVE to be compared correlation with other constructs of the framework, the square root of AVE must remain higher than the correlation value of other constructs (Fornell & Larcker, 1981). The diagonal values show discriminant validity in table 2 below.

Table 2: discriminant validity

	EP	GHR	GTFL	G_inno	IEB
EP	0.726				
GHR	0.503	0.722			
GTFL	0.589	0.529	0.850		
G_inno	0.556	0.598	0.563	0.801	
IEB	0.598	0.515	0.770	0.571	0.787

The above stated table demonstrated the discriminant validity of constructs, the diagonal values shows that square root of AVE of each construct remains higher than correlation with other variables. Therefore, it satisfied the condition for acceptable discriminant validity.

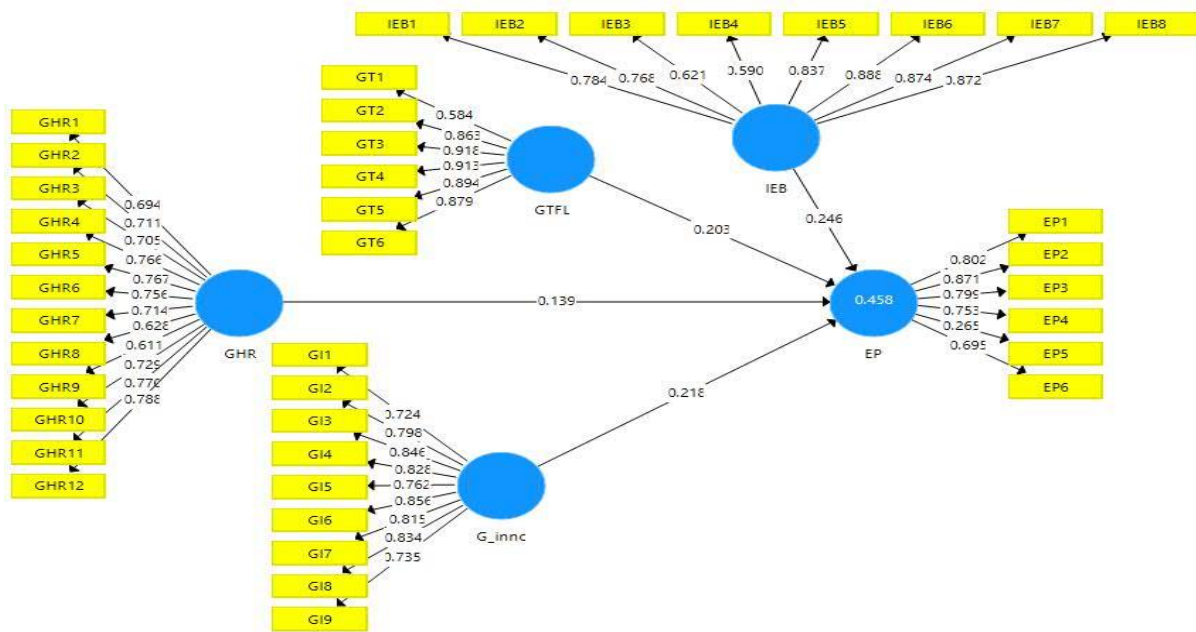


Fig 2: Measurement Model

Structural Equation Modelling (SEM)

The second section of analysis consists of structural equation modelling (SEM); that investigates the hypothesized relationship. The current section investigated seven hypothesized relationship. The table 3 below demonstrates the direct relationships; the relationship is examined on the base of β value for hypothesis direction and t-value for significance of relationship with 5% error margin which is depicted as P-value and it must remain lower than 0.05 for acceptable significance relationship. The t-value must remain higher than 1.96 with p-value must be lower than 0.05 for significance of relationship.

Table 3: direct relationship assessment

	Original Sample (O)	T Statistics (O/STDEV)	P Values
GHR -> EP	0.139	1.681	0.093
GTFL -> EP	0.203	2.165	0.031
G_inno -> EP	0.218	2.914	0.004
IEB -> EP	0.246	2.518	0.012

The above table examined the hypothesized relationship; the first hypothesis H1 investigates the influence of green transformational leadership on environmental performance among hotels of Pakistan. The results of first hypothesis shows that ($\beta = 0.203$, t-value = 2.165, p-

value = 0.031); that satisfied the cut off point for t-value and p-value. So therefore, H1 is accepted on statistical grounds.

The second hypothesis H2 investigated the relationship between green innovation and environmental performance among hotel industry of Pakistan, the results depicted the significant relationship based on ($\beta = 0.218$, t-value = 2.914, p-value = 0.004) as t-value found to be higher than cut off point with acceptable p-value. So therefore, hypothesis H2 is accepted on statistical basis.

The third hypothesis examined the relationship between green human resource management and environmental performance, the result of the hypothesis shows that ($\beta = 0.139$, t-value = 1.168, p-value = 0.093); the t-value found to be lower than cut off point with higher p-value, thus hypothesis H3 is rejected on statistical grounds.

The fourth hypothesis H4 investigated the relationship between individual employee behaviour under covid-19 to be influential for environmental performance. The result shows interesting findings that ($\beta = 0.246$, t-value = 2.518, p-value = 0.021) that satisfied the t-value and p value conditions, so therefore H4 is accepted significant statistically.

In nutshell, the study entails four direct hypotheses to explain the environmental performance by exogenous constructs green transformational leadership, green innovation, green human resource management practices and individual employee behaviour under covid-19. The three out of four hypotheses found to be statistically significant; the green HR found to be insignificant on the base of collected data from hotel industry of Pakistan.

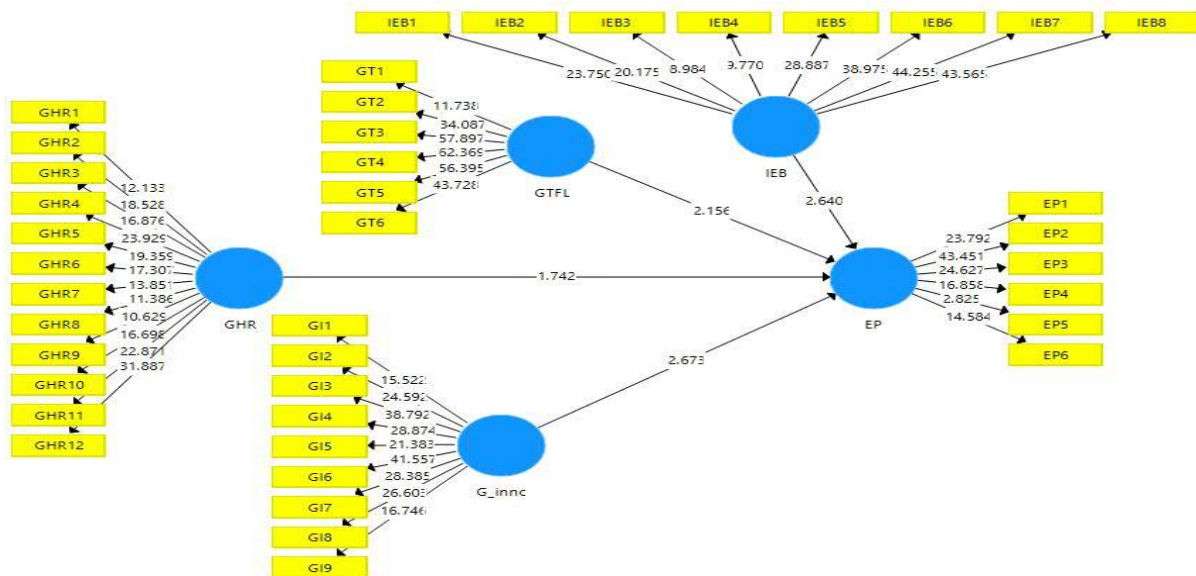


Fig 4: Structural Equation Model

Moderation analysis

The current section of analysis examined the moderation role of individual employee behaviour under covid-19 between exogenous and endogenous constructs. The moderation role assessment in current study contributes to the body of knowledge as pandemic situation has occurred recently in modern era that found to be harmful for hospitality industry. The table 4 demonstrates the moderation relationship between constructs of framework.

Table 4: Moderation analysis (Individual Employee Behaviour under covid-19)

	Original Sample (O)	T Statistics (O/STDEV)	P Values
GHR -> EP	0.117	1.437	0.151
GTFL -> EP	0.277	2.875	0.004
G_inno -> EP	0.161	2.058	0.040
IEB -> EP	0.230	2.663	0.008
Moderating Effect 1 -> EP	0.057	0.712	0.477
Moderating Effect 2 -> EP	0.050	0.596	0.551
Moderating Effect 3 -> EP	-0.261	3.452	0.001

The above table demonstrated moderation analysis of hypothesized relationship of framework, hypotheses H5, H6 and H7 investigated the moderating role of individual employee behaviour under covid-19 to explain environmental performance among hotel industry of Pakistan.

The first moderating hypothesis H5 examined the relationship between green transformational leadership and environmental performance, the relationship is assessed on similar conditions of t-value and p-value; that must meet criteria for statistically acceptable. The result of H5 shows that ($\beta = 0.057$, t-value = 0.712, p-value = 0.477); based on statistical values there is no moderation effect is observed, hence it H5 is rejected statistically.

The H6 investigates the moderation role of individual employee behaviour under covid-19 between green innovation and environmental performance, the results depicted that no moderation observed in relationship based on ($\beta = 0.050$, t-value = 0.596, p-value = 0.551). So therefore, H6 is rejected statistically.

The H7 examined the moderator relationship of individual employee behaviour under covid-19 between green human resources management practices and environmental performance. The result of the hypothesis H7 shows that ($\beta = -0.261$, t-value = 3.452, p-value = 0.001); based on statistical grounds the relationship found to be statistically significant.

In nutshell, no moderation is observed in hypotheses H5 and H6 but individual employee behaviour under covid-19 moderated relationship between green human resource management and environmental performance.

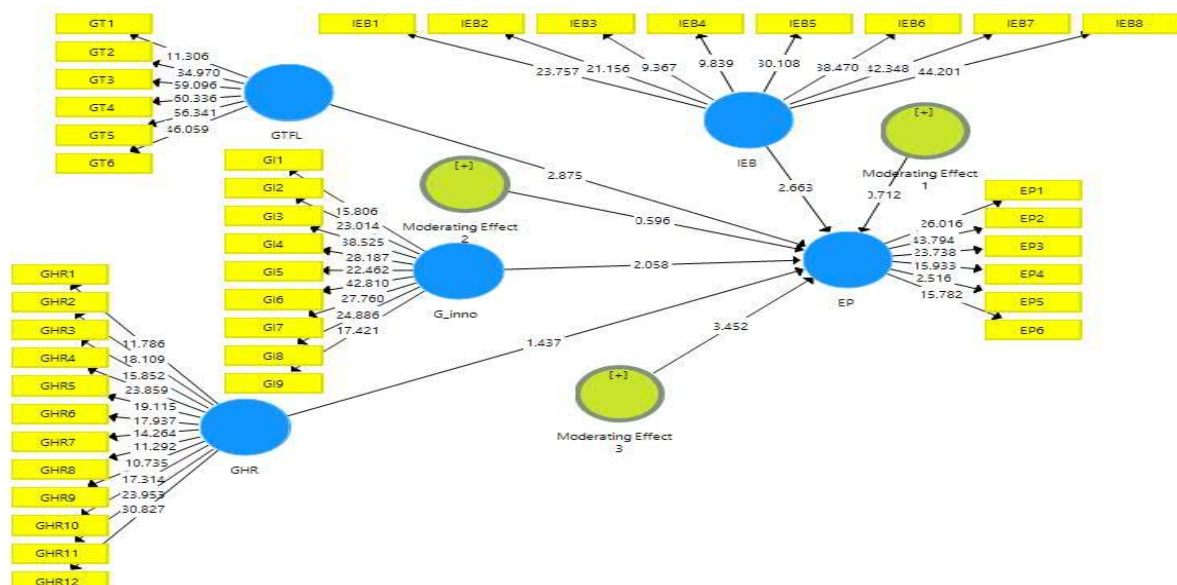


Fig 5: Moderation analysis
Summary of hypotheses results:

S#	Hypotheses	Results
1	Green Transformational Leadership positively influences Environmental Performance	Sig
2	Green Innovation positively influences Environmental Performance	Sig
3	Green Human Resource Management Practices positively influences Environmental Performance	In-Sig
4	Individual Employee Behaviour positively influences Environmental Performance	Sig
5	Individual Employee Behaviour moderates the influence of Green Transformational Leadership and Environmental Performance	In-Sig
6	Individual Employee Behaviour moderates the influence of Green Innovation and Environmental Performance	In- Sig
7	Individual Employee Behaviour moderates the influence of Green HRM practices and Environmental Performance	Sig

Conclusion

The scarcity of studies on determining the environmental performance among hospitality industry of Pakistan has been highlighted. The research scholars have given attention to hospitality industry around the world but there was dire need to empirically examine the influence of greening aspect of various factors to explain environmental performance in hospitality industry of Pakistan. Hence, the prime concern of study was to explain the environmental performance based on green transformational leadership, green innovation and green human resource management practices. The study is unique and contributes to the body of knowledge by highlighting important factors based on greening practices to enhance environmental practices. The study was conducted on hotel industry of Pakistan and data was collected from 101 hotels of Pakistan. The collected data was examined through PLs and found the green transformational leadership, green innovation and green human resources practices significantly influence and enhanced the environmental performance. The study was conducted during pandemic covid-19 and moderating variable individual employee behaviour under covid-19 was examined and found no moderation effect between green transformational leadership and green innovation to influence environmental performance. The moderation role was observed between green human resource management and environmental performance. The study suggests hospitality industry to adopt green practices in business operations to response towards global warming and environmental concerns.

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