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## Exploring the Interactive Relationship Between Individual Attributes and Employee Green Behavior with Green Self-Efficacy

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### **Abstract**

*Concerns regarding environmental protection and sustainability are a common focus across multiple fields. Employee green behavior is regarded as the key to achieving environmental sustainability in every field. Researchers have provided valuable insights into the organizational determinants of employee green behavior. However, only a few studies have focused on the impact of individual attributes in promoting employee green behavior. Therefore, the present study aims to analyze the influence of individual attributes, including consciousness, moral reflectiveness, and environmental knowledge on employee green behavior. In addition, the study also analyzes the mediating effect of green self-efficacy. The study conducts an empirical analysis of the underlying research framework by conducting a survey among the nurses of the DHQ hospitals in Punjab, Pakistan. The sample was selected by applying convenience and purposive sampling techniques. The collected quantitative data was analyzed with the help of Partial Least Square – Structural Equation Modeling (PLS-SEM). The results revealed a significant and positive impact of consciousness and moral reflectiveness on employee green behavior. In addition, the study also reported the significant mediating impact of green self-efficacy on the direct correlations. Thus, the findings of the study hold significant implications for the policymakers and the employees of the healthcare sector.*

**Keywords:** *Employee Green Behavior, Green Self-Efficacy, Individual Attributes.*

### **Introduction**

The healthcare sector is one of the most important industries in the world (Zamparas et al., 2019). The core values of the healthcare sector consist of the welfare of society. However, ironically, hospitals are one of the leading contributors to environmental deterioration, greenhouse gas emissions, and the generation of toxic waste materials worldwide. In addition, the delivery of surgical care consumes a great amount of energy and relies on the utilization of a variety of equipment, which makes it resource-intensive and producer of large quantities of waste. With rising concerns regarding climate change, it is imperative for hospitals to redefine the environmental impact of their routine medical practices (Martins et al., 2022). The healthcare sector, including pharmaceuticals, contributes to 4.4 per cent of the global greenhouse gas emissions (Berniak-Woźny & Rataj, 2023). Besides greenhouse gas (GHG) emissions, the healthcare sector is responsible for increasing the pollutants in the air, soil, and water, which leads to waste generation and consumption of non-renewable resources (Corvalan et al., 2020; Lenzen et al., 2020).

The world is becoming more aware of the environmental footprint caused by the healthcare sector, which makes it an ethical responsibility of healthcare professionals and policymakers to re-evaluate the healthcare system to reduce its negative impact on the environment (Sijm-Eeken et al., 2023). The most

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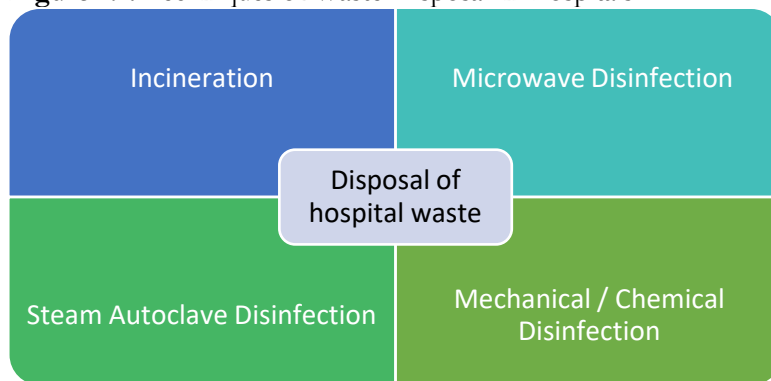
important feature of any environmental management initiative is the human factor involved, making it the crucial responsibility of human resources to promote green practices within the organizations (Jabbour et al., 2019). An organization's efforts to increase its environmental performance can bring no results unless its employees have a clear understanding of the green vision of the organization and share the vision and morale to align their personal goals with the green goals of the organization. The employees can, thus, play a significant role in enhancing the organization's environmental performance (Afsar et al., 2020). Pakistan is a highly populated developing country with its healthcare system facing several resource constraints, which makes environmental management practices difficult due to the lack of resources (Khan et al., 2019). The healthcare sector is a major consumer of plastic, leading to a great amount of plastic waste in the environment. According to the World Health Organization, 15 per cent of the waste generated by hospitals can be infectious and toxic (WHO, 2018), which makes the establishment of green practices in the healthcare sector very crucial. Table 1.1 shows the general types of waste generated by the healthcare sector.

**Table 1.1:** Types of Hospital Waste.

Type of waste	Description
Infectious waste	Wastes from patients with infections
Pathological waste	Infected tissues or bodily organs
Sharps waste	Surgical equipment
Chemical waste	Various solvents and reagents
Pharmaceutical waste	Expired and contaminated drugs
Cytotoxic waste	Waste with genotoxic properties
Radioactive waste	Waste containing radionuclides
Non-hazardous or general waste	Waste that is not harmful.

The Environmental Protection Department of the government of Punjab, Pakistan highlights the use of techniques in practice for the disposal of hospital waste in Pakistan as shown in Figure 1.1. However, these techniques lack efficiency and sustainability due to their subsequent negative impact on the environment.

**Figure 1.1:** Techniques of Waste Disposal in Hospitals.



Source: (EPD, 2023)

The present study intends to explore the factors that influence green employee behaviour in the healthcare sector of Pakistan. The study investigates the impact of individual attributes including consciousness, moral reflectiveness, and environmental knowledge on employee green behaviour with the mediating effect of green self-efficacy of employees. There is a significant gap in the studies analysing the green practices in the healthcare sector in Pakistan. Ahmad et al. (2021) analysed the

Corporate Social Responsibility practices at the employee level in Pakistan. However, the study focused on the role of leadership and not the individual determinants of green employee behaviour. Therefore, the present study is immensely significant for exploring the rarely analysed individual attributes for promoting green employee behaviour in the healthcare sector.

## Literature Review

In the ever-evolving environment of healthcare, fostering environmentally responsible behavior among healthcare personnel is essential. This literature review investigates the relationship between individual characteristics such as consciousness, ethical reflection, and environmental knowledge and their impact on encouraging environmentally friendly behaviors among healthcare professionals. Understanding these relationships is necessary for developing the foundation for encouraging self-belief in environmentally favorable choices, potentially improving healthcare sustainability. This review intends to highlight the importance of individual qualities in fostering sustainable practices in healthcare environments by analyzing existing research and empirical evidence within the health sector.

### Individuals Attributes and Employee Green Behavior

The literature emphasizes the relevance of ideals and self-concordance for employees. Recent advances, on the other hand, emphasize healthcare self-motivated capabilities, management, and practices in relation to human resource management such as training. Conversely, the interaction of such micro- and macro-factors implies that such activities do not operate evenly and are dependent on employees' environmental consciousness. As a result, we emphasize the need to study all sorts of employee green behavior in the health sector from a dynamic systems viewpoint.

### *Consciousness and Employee Green Behavior*

Burnout was common among healthcare personnel who cared for people with consciousness problems. The young nurses although had less education and experience but had a great chance to suffer in regard to significant burnout (Wang et al., 2020). A study investigates the association flanked by green practices taken by hospitals and consumer devotion while controlling for those consumers which determine a great level of green consciousness. Consumers are concerned about the utilization of green efforts in healthcare market strategies. There is a dire need to do the analysis on the integration of employee green behavior by Healthcare administrators for a cost-benefit (Safrit, 2019). The most important criteria in affecting nurses' performance of patient aware level evaluation were determined to be knowledge and experience. To enhance the assessment abilities, and experience that had a significant impact on assessment accuracy, formal training play a dominant role (Chan et al., 2013). From this, the following hypothesis can be proposed:

**H1:** *There is a significant relationship between consciousness and employee green behavior.*

### *Moral Reflectiveness and Employee Green Behavior*

Hospital's cross-departmental staff present green innovation ideas, in order to strengthen internal environmental education and management, which ultimately tends to set up a high-quality enticement system for front-line nursing staff and put into practice the hospital's sustainable expansion tactic (Lee et al., 2023). Employee green behavior, and moral reflectiveness influenced by the responsible leadership which utterly mediates the relationship flanked by responsible leadership and employee green behavior. Compassion negatively moderates the link flanked by employee green behavior and moral reflectiveness, which postulates that when the stronger compassion of employee's examined it ultimately influence the employee green behavior to having a negative effect of moral reflectiveness.

In addition, compassion moderates the association flanked by responsible leadership and employee green behavior by mediating impact of moral reflectiveness, but the mediation effect of moral reflectiveness is abridged when compassion is strong (Yang, 2019). From this, the subsequent hypothesis can be proposed:

**H2:** *There is a significant relationship between moral reflectiveness and employee green behavior.*

### ***Environmental Knowledge and Employee Green Behavior***

Knowledge management play a dominant role in Employee green behavior which examined that steadily corporate development emphasize on the environmental protection and has been a significant and key antecedent to studying this topic, although less studies undertaken. A study indicate positive effect on employee green behavior by showing the link flanked by environmental knowledge application and sharing; environmental behavioral intention mediates the relationship flanked by employee green behavior with environmental knowledge application and environmental knowledge sharing (Zhang et al., 2021; Chowdhury et al.,2021; Aziz et al.,2020; Sun et al.,2022; Arain et al.,2019; Meo et al.,2020; Numan et al.,2022). It can urge employees to be more conscientious in minimizing green tribulations by fostering environmental or green conduct at work. A study used to investigate the attitude of employees towards green workplace through the association flanked by employee environmental awareness and environmental attitude (Bashirun & Noranee, 2020). From this, the following hypothesis can be proposed:

**H3:** *There is a significant relationship between environmental knowledge and employee green behavior.*

### **Green Self-Efficacy as A Mediator**

Green behavior among nurses may immediately decrease expenses by conserving materials and energy while also protecting the natural environment and organizational sustainability. Nurses' green behavior is favorably influenced by their desire to participate in green behavior, this determines the strong linkage when in the organization ethical leadership is high as compare to when it is low (Li et al., 2021). A study also looked at the mediating role flanked by self-efficacy and health consciousness. The study's findings reveal a favorable association flanked by self-efficacy, health consciousness, and satisfaction. Furthermore, it demonstrated a statistically significant positive impact on self-efficacy in regard to mental well-being, psychological empowerment, and self-enhancement goals had (Muthuswamy & Akilandeswari, 2023). In middle-level employees, EL affected pro-environmental conduct. The association was mediated by green incentives and green self-efficacy. Green training influenced the association flanked by green incentives and green self-efficacy (Ahuja et al., 2023).

Green behavior ultimately tends to greater engagement from those employees who are morally reflective (Mansour et al., 2022). To succeed green efforts, it is crucial for the organizations' Employees' (Mughal et al., 2022). Employees' green behavior is critical to achieving organizations' sustainability goals. Leadership is essential in shaping and fostering desirable employee behaviors. In order to shape the green behavior green self-efficacy collaborate with green servant leadership (Faraz et al., 2021). Personal moral reflectiveness and green conscientiousness impact nurses staff's green behavior in the workplace (Wu & Liu, 2023). Green policies have been enacted by governments, which are used by the organizations in order to develop ecologically friendly working practices conducted through these policies. The effectiveness regarding these practices is profoundly contingent on the personnel and their level of green behavior. As a result, it is necessary to discover if additional variables can positively affect green behavior (Fawehinmi et al., 2020).

In the twenty-first century, environmental challenges have arisen as a key challenge for organizations, and many are working hard to lessen their environmental imprint. In the light of rising environmental

challenges, a study condemned the contribution of green human resource management (GHRM) in regard to hospital's environmental performance. Motivated staff are very effective because they engage in green behavior, consequential in enhanced hospital environmental recital (Nisar et al., 2022). A study examines the impact of green human resource management performance while accounting for the mediating effect of green self-efficacy, in regard to green selection, green rewards, green training, and green performance evaluation on long-term performance whether it is economic, social, or environmental. The concluded remarks determines that, although the usage of environmental knowledge is the primary key but it is crucial for the developing nations to achieve sustainable development (Javaid et al.). From this, the following hypothesis can be proposed:

**H4:** *Green self-efficacy is mediating the relationship between consciousness and employee green behavior.*

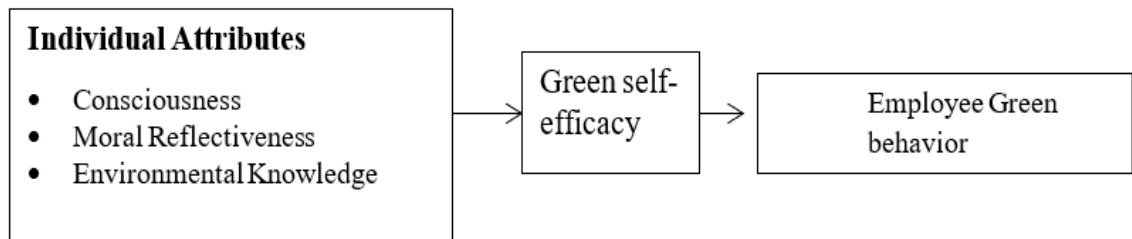
**H5:** *Green self-efficacy is mediating the relationship between moral reflectiveness and employee green behavior.*

**H6:** *Green self-efficacy is mediating the relationship between environmental knowledge and employee green behavior.*

### Theoretical Background

The promotion of eco-friendly practices among healthcare practitioners in Pakistan is a significant subject matter. Despite substantial global study on how human attributes influence environmentally conscious behavior, there is a noticeable lack of information particular to Pakistan's healthcare industry. There has been little research on how attributes like awareness, ethical consideration, and environmental understanding influence the adoption of sustainable behaviors among healthcare practitioners in Pakistan. Addressing this gap, the current study intends to explore and clarify these relationships in order to promote the adoption of eco-friendly strategies within Pakistan's healthcare system.

**Figure 2.1:** Conceptual Framework.



The social cognitive theory (SCT) had its roots in the Social Learning Theory (SLT), In 1986 it developed in the SLT and in 1960s Albert Bandura developed the social cognitive theory. This theory determines that in social context learning postulates the reciprocal interaction of the persons, their behavior regarding the environment. It distinguishes in regard to internal, external reinforcement and social influence. Social learning theory examine the inimitable path which determines the social environment to examine the behavior of the individuals in which they retain and learn (Schunk & DiBenedetto, 2020). It postulates behavioral activities through prior experience and examines whether these activities occur or not. Reinforcing, expectations, and expectancies, all of these considers the prior experience which determine whether a person will contribute in a given behavior and the reasons for that conduct (Hagger & Hamilton, 2022).

A number of theories demonstrated in the health sector, but little examine behavioral maintenance because they do not focus on the behavior initiations. This is deplorable since the deep-seated rationale of public health is behavior maintenance, not only behavior initiation. Social cognitive theory inquire about human behavior management that how human manage their behavior in order to sustain over

time to accomplish goals regarding the directed behavior (Beauchamp et al., 2019). The theory evolved around the following constructs:

1. Mutual determinism
2. Behavioral aptitude
3. Observational erudition
4. Reinforcement
5. Expectations
6. Self-efficacy

Social ecological model considered by the social cognitive theory through different levels to examine the behavioral change of the individuals. In recent years, social cognitive theory greatly influences the health sector by giving emphasis on the individual and reinforcement and became the focus point in regard to health promotions activities. Overall, the development of such theories in public programs such as in health sector may be difficult but not impossible in order to applicability of all the components of social cognitive theory.

## **Research Methods**

### **Sample and Procedure**

The administrative and higher management of the DHQ hospitals was accessed and communicated to get permission for the data collection and the data was collected with an authority letter and only voluntary participation was asked and entertained. The nurses were selected as the respondents of the study, and they were accessed with convenience and purposive sampling. The online Google Doc method with a self-administered approach was practiced gathering the responses. The nearby hospitals were accessed for physical data collection and the link of the questionnaire was shared through the management to the other cities' hospitals and the generalizability and maximum incorporation of the target population study was ensured. The data collection was conducted in some phases; the physical data collection was conducted within a single phase of time, meanwhile, in the online data collection, first the link was distributed with the brief of the target population and after some time, a reminder was communicated by the management to motivate their nurses to fill the response sheet. 500 questionnaires were distributed physically, and a 63% response rate was received which was 315 questionnaires. The online medium response rate was very low and only 95 response sheets were received. Thus, the study was empowered with a total of 410 questionnaires in total out of which, some non-useful and blank responses were dropped out and the study used a response sheet of 373 responses for data analysis.

### **Measures**

The scale items adopted from previous very recent studies were incorporated into the questionnaire and the items were measured with the help of the Likert scale. This scale is the most widely adopted approach for measuring or ranking the scale items in the questionnaire. The scale has a range of 1 to 5 in which 1 indicates strongly disagree and 5 has a meaning strongly agree.

Additionally, the exact number of items borrowed for the three independent variables environmental consciousness, moral reflectiveness, and green knowledge; for the mediator green self-efficacy and the dependent variable employee green behavior with their sources have been comprehensively explained in Table 3.1. In addition to the sources, the table has also attached some of the item statements to reflect the appropriateness of the adopted scale to reflect the targeted variable.

**Table 3.1:** The Measurements of The Measures.

Variable	Items adopted	References	Example items
Environmental consciousness	3	(Khan, 2023)	“In choosing travel modes we should not exploit natural resources to conserve the environment and nature”
Moral reflectiveness	5	(Wu & Liu, 2023)	“I think about the morality of my actions almost every day”
Employee green behavior	3	(Wu & Liu, 2023)	“I try to print double-sided as much as possible in the office”. “I turn off the lights when I leave the office.”
Environmental Knowledge	5	(Chaihanchai & Anantachart, 2023)	“I know more about recycling than the average person. ”
Green self-efficacy	4	(Khan, 2023)	“I think I can succeed in environmental protection.” “I have the ability to deal with the environmental problem effectively. ”

## Results

### Sample Properties

Since the demographics of the respondents are an integral part of the statistical analysis, the present study has conducted an effective analysis of the sample properties, including the demographical information of the respondents that was collected with the help of the questionnaire. The present study included 373 valid participants from DHQ hospitals in Punjab. The sample comprised of 135 male and 238 female employees, which accounted for 36.2 per cent and 63.8 per cent of the total sample respectively as shown in Table 4.1.

**Table 4.1:** Gender Frequency of Respondents.

	Gender	
	N	%
Male	135	36.2%
Female	238	63.8%

The majority of the participants (58.2 per cent) were under 37 years old. Table 4.2 indicates the age range of the participants. Only 4.3 per cent of the participants were above 56 years old.

**Table 4.2:** Age Range of Respondents.

	Age	
	N	%
26 to 31 years	109	29.2%
32-37 years	108	29.0%
38-43 years	81	21.7%
44-49 years	39	10.5%
50-55 years	20	5.4%
56 years and above	16	4.3%

The majority of the participants (92.2 per cent either had a diploma or had completed their bachelor's. Only 7.8 per cent of the participants had a master's degree, as shown in Table 4.3

**Table 4.3:** Education of Respondents.

Education		
	N	%
Diploma	173	46.4%
Bachelor's degree	171	45.8%
Master's degree	29	7.8%

The data concerning the nature of the participants' employment was also collected, which showed that the nature of the employment (63 per cent) of the majority of the participants was permanent. However, the presence of 37 per cent of contractual employees indicates that a substantial portion of the hospital staff is employed on a contractual basis.

**Table 4.4:** Nature of Employment of Respondents.

Nature of Employment		
	N	%
Permanent	235	63.0%
Contractual	138	37.0%

In addition, the collected data also contained information regarding the length of services of the participants in the healthcare industry. Table 4.5. shows that the majority of the participants (45.3 per cent) have been a part of the healthcare industry for 7 to 9 years. Only 3.2 per cent of the participants had less than 1 year of experience in the healthcare industry.

**Table 4.5:** Length of Service of Respondents in Healthcare.

Length of Service in Healthcare Industry		
	N	%
Less than 1 year	12	3.2%
Up to 1 to 3 years	75	20.1%
4 - 6 years	99	26.5%
7 - 9 years	169	45.3%
10 years and above	18	4.8%

Moreover, the data regarding the participants' length of service in the current hospital was also collected, which showed that the majority of the participants (28.4 per cent) had been working in the current hospital for the last 7 to 9 years as shown in Table 4.6.

**Table 4.6:** Length of Service of Respondents in the Current Hospital.

Length of Service in Current Hospital		
	N	%
Less than 1 year	18	4.8%
Up to 1 to 3 years	92	24.7%
4 - 6 years	85	22.8%
7 - 9 years	106	28.4%
10 years and above	72	19.3%

### Factor Loading

Table 4.7 represents the summary of the factor analysis in the rotated component matrix. According to Hair et al. (2010), the threshold value for the factor loading should be ideally greater than 0.5 or 0.7, indicating that only values with a factor loading above 0.5 or 0.7 appear in the rotated component matrix. Table 4.7 indicates that items of every variable are indicated in separate columns, ensuring the



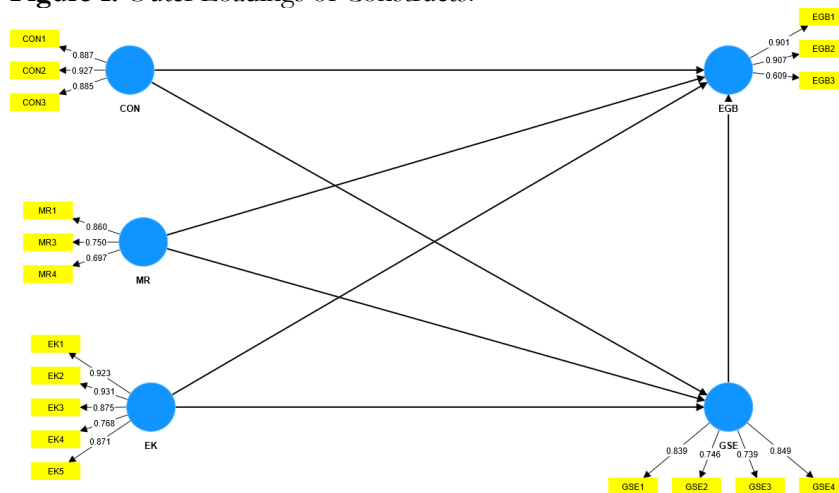
absence of cross-loading among items. Moreover, it can be observed that items 2 and 5 of MR were deleted because they did not fit the measurement model. The rest of the items have factor loading in the appropriate range, which indicates their appropriateness for the measurement of the respective construct. Figure 4.1 indicates the outer loadings of each construct from the present study's framework.

**Table 4.7:** Factor Loadings.

	CON	EGB	EK	GSE	MR
CON1	0.887				
CON2	0.927				
CON3	0.885				
EGB1		0.901			
EGB2		0.907			
EGB3		0.609			
EK1			0.923		
EK2			0.931		
EK3			0.875		
EK4			0.768		
EK5			0.871		
GSE1				0.839	
GSE2				0.746	
GSE3				0.739	
GSE4				0.849	
MR1					0.86
MR3					0.75
MR4					0.697

“CON = Consciousness, EGB = Employee green behaviour, EK = Environmental knowledge, GSE = Green self-efficacy, MR = Moral reflectiveness”

**Figure 1:** Outer Loadings of Constructs.



### Construct and Discriminant Validity

The researcher also calculated the construct and discriminant validity of the collected data to ensure their robustness and accuracy for the hypothesis testing. Table 4.8 indicates the data related to the

construct validity of the variables. The value of Cronbach's Alpha reflects the internal consistency and reliability of each construct. Since, values of Cronbach's Alpha above 0.7 reflect the acceptable level of internal consistency, the variables of the study possess this feature. Only the value of MR is below 0.65 and that by the rule of rounding off can be regarded as within the acceptable range. Composite reliability also reflects the internal consistency reliability of the constructs. The values of composite reliability above 0.7 are considered within the acceptable range, therefore, all constructs of the study are within the acceptable range. In addition, the Average Variance Extracted (AVE) above 0.5 is considered within the acceptable range. All the constructs have the AVE within the acceptable range as shown in Table 4.8.

**Table 4.8:** Construct Validity.

	$\alpha$	CR	AVE
CON	0.882	0.883	0.81
EGB	0.738	0.791	0.668
EK	0.923	0.928	0.767
GSE	0.804	0.81	0.631
MR	0.656	0.671	0.596

The researcher has also tested the discriminant validity of the constructs to ensure that there is a greater correlation among the items of a construct than between the constructs. Table 4.9 shows that all of the constructs have considerable discriminant validity and thus they are valid for the present study's framework. Thus, the results of tests of construct and discriminant validity validate the appropriateness of the measurement model for the present study. This, in turn, enhances the authenticity and validity of the findings of the present study.

**Table 4.9:** Discriminant Validity.

	CON	EGB	EK	GSE	MR
CON	0.9				
EGB	0.486	0.818			
EK	0.392	0.495	0.876		
GSE	0.479	0.691	0.636	0.795	
MR	0.405	0.49	0.416	0.534	0.772

## Hypothesis Testing

After ensuring the appropriateness of the measurement model, the PLS-SEM was applied to test the hypotheses. The findings of the analysis indicate that CON had a significant and positive impact on EGB, as evidenced by its p-value which is less than 0.01. Table 4.10 shows that a unit increase in CON would lead to a 17 per cent rise in EGB. Thus, the findings support the first hypothesis. Similarly, MR ( $p < 0.01$ ) has a positive and significant impact on EGB, thus affirming the second hypothesis. Every unit increase in MR would lead to a 24 per cent increase in EGB. In addition, the present study also predicted a significant impact of EK on EGB via the third hypothesis. However, the results indicate that the p-value for EK (0.855) is much higher than the threshold, showing that the impact of EK on EGB is highly insignificant. Therefore, the third hypothesis is rejected. Furthermore, the present study has also evaluated the mediating effect of GSE in all of the aforementioned correlations. The analysis revealed a significant mediating of GSE for all the IVs, thus supporting the H4, H5, and H6. Therefore, it can be estimated from the results that GSE significantly enhances the impact of CON and MR on EGB. Though the findings reported an insignificant impact of EK on EGB, its impact is significant in the presence of GSE. The p-values of all the variables are indicated in Table 4.10.

**Table 4.10:** Hypothesis Testing.

	Estimate	STD	T-stat	P values
CON -> EGB	0.171	0.038	4.465	0
EK -> EGB	-0.008	0.045	0.183	0.855
MR -> EGB	0.246	0.05	4.892	0
CON -> GSE -> EGB	0.095	0.026	3.612	0
MR -> GSE -> EGB	0.135	0.025	5.318	0
EK -> GSE -> EGB	0.252	0.035	7.251	0

## Discussion

The present study sought to investigate the impact of individual attributes on the cultivation of employee green behavior in the healthcare sector. The first hypothesis predicted a significant impact of consciousness on nurturing the employee's green behavior. The findings of the study affirm this hypothesis by indicating a highly significant and positive impact of consciousness on EGB. The finding indicates that employees should be mindful of the impact of green practices on the environment. Being aware of the consequences of their unsustainable activities can motivate employees to engage in green practices and reduce the negative impact of healthcare practices on the environment. Thus, healthcare facilities should invest in awareness programs to enhance the consciousness of employees regarding green practices. Furthermore, the second hypothesis proposed a significant impact of moral reflectiveness on EGB. The findings support this proposed correlation by indicating a significant and positive impact of MR on EGB. The affirmation of the second hypothesis suggests that engaging in moral reflection can encourage employees to participate in green practices and exhibit green behavior. Moral reflectiveness can help employees view green behavior as an ethical responsibility. Various awareness campaigns can be organized to present green employee behavior as an ethical responsibility of each employee. Once employees associate their moral responsibilities with EGB, they will be more likely to engage in green practices. In addition, the study also hypothesized a significant correlation between environmental knowledge and EGB. However, the findings indicate an insignificant impact of EK on EGB, which rejects the H3. In addition to direct relations, the mediating effect of GSE was also evaluated. The findings support a significant mediation of GSE for all of the IVs. The acceptance of H4 and H5 indicates that GSE has the potential to enhance the impact of CON and MR on EGB. Furthermore, the direct correlation between EK and EGB is not supported by the findings of the study. However, the results indicate a significant impact of EK on EGB in the presence of the mediating effect of GSE. This indicates that employees can materialize their environmental knowledge in the form of their green behavior only when they possess a certain level of green self-efficacy. The significant mediation of GSE can be backed by the concept of self-efficacy propagated by Bandura (1982) who regarded self-efficacy as a robust instrument for bringing change in individual behavior. The findings of this study are in line with the view of Mendis and Welmilla (2021) who regarded green consciousness as a crucial factor for individuals to engage in green and environment-friendly practices. Similarly, Cheema et al. (2020) also argued that having environmental consciousness can motivate employees to engage in pro-environmental behavior.

## Conclusion

In the wake of increasing environmental concerns, improving employees' green behavior is a prevalent topic in contemporary empirical literature. The quantitative research design was adopted to collect relevant data from the DHQ hospital in Punjab, Pakistan. The present study has provided empirical evidence of the

efficacy of individual attributes like consciousness and moral reflectiveness on employees' green behavior. Thus, the study concluded that individual consciousness and moral reflectiveness are two significant factors, which can cultivate employees' green behavior. Moreover, the study also revealed a significant mediating effect of green self-efficacy on the impact of consciousness, moral reflectiveness, and environmental knowledge on employee green behavior. When employees have a high level of green self-efficacy, the impact of consciousness, moral reflectiveness, and environmental knowledge on employee green behavior is more substantial. Thus, the present study has offered valuable conclusions regarding the individual-level determinants of employee green behavior in the healthcare sector.

## **Implications**

### ***Theoretical Implications***

The present study offers valuable theoretical implications in terms of its analysis of the determinants of green employee behavior in the context of the health sector. Drawing on the tenets of Bandura's Social Cognitive Theory (SCT), the study offers a significant theoretical contribution to the existing theoretical literature on this theory. The present study helps advance the existing theoretical literature of SCT by incorporating it into analyzing the individual-level behavior change in terms of employee green behavior of employees in the healthcare sector. The present study helps advance the understanding regarding the efficacy of individual attributes in promoting employee green behavior. Moreover, drawing on Bandura's concept of self-efficacy, the present study also evaluates the role of green self-efficacy in promoting employee green behavior. Thus, the study makes significant theoretical contributions to the existing literature on green behavior and broadens the existing theoretical framework. These theoretical contributions of the study have the potential to guide future studies in the area.

### ***Practical Implications***

The study's practical implications are evident from its valuable findings regarding the impact of individual attributes and their efficacy in encouraging employee green behavior in the healthcare sector. The findings of the study offer guidelines for policymakers in the healthcare sector to design strategies that encourage employees to engage in green practices. In the wake of rising sustainability concerns and the environmental impact of the healthcare sector, the findings of the study imply a need for the healthcare sector to re-evaluate its environmental protection policies and refrain from engaging in activities that harm the environment in any way. The significant and positive impact of consciousness and moral reflectiveness on employee green behavior indicates the need for policymakers to raise environmental awareness among people. In addition, such programs should be launched, which enhance the green self-efficacy of employees and empower them to exhibit a practical manifestation of employees' consciousness, moral reflectiveness, and environmental knowledge of their green behavior. Healthcare facilities should arrange such campaigns and programs that educate the employees regarding the implications of their unsustainable practices and train them about the green alternatives to the existing practices. Thus, the healthcare sector can establish a green culture and enhance its environmental performance. In addition, the healthcare sector in Pakistan, in particular, can use the findings of these studies to enhance the green behavior of their employees and motivate them to engage in green practices.

## **Limitations and Future Directions**

The present study examined the influence of individual-level attributes on employee green behavior in the DHQ hospitals in Punjab, Pakistan. However, all of the variables in the present study's research framework are from the employees' perspective. While filling out the questionnaires, the employees

may or may not have been affected by the social approval effect. Future studies, therefore, should enhance the research design by incorporating multiple sources of data collection to offer a more accurate verification of the correlation between individual attributes and employee green behavior. Moreover, there may be multiple factors affecting employee green behavior in the health sector and it is quite challenging to evaluate all of the factors in a single study. Therefore, future studies can evaluate the roles of other mediating and moderating factors, such as top management support and employee training on employee green behavior.

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