

The Impact of Green Training and Development on Green Organizational Citizenship Behavior: With the Mediating effect of Green Employee Attitudes at a Sri Lankan Apparel Sector Company

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Today, worldwide organizations are prioritizing their impact on the environment and are taking initiatives to reduce environmental impact. Organizations are making huge investments to enhance their employees' green behaviors towards the environment. But employees are indicating less environmentally responsible behavior. This research aims to investigate how green training and development affect green organizational citizenship behavior, considering the mediating role of employee green attitudes at a selected apparel industry company in Sri Lanka. Apparel manufacturing sector is the key contributor to the Sri Lankan economy. Data was collected via an online questionnaire distributed to 108 executive-level and higher employees, selected through simple random sampling. The sample varied by gender, age, educational level, and years of service. Data analysis was performed using SPSS 25.0. The findings indicate that green training and development have a significant positive impact on both green organizational citizenship behavior and green employee attitudes. Additionally, green employee attitudes positively influence green organizational citizenship behavior. While those relationships are significant, they are not strongly correlated. Moreover, controlling green training and development, green employee attitudes have a significant direct impact on green organizational citizenship behavior. In order to analyze the mediating effect, the bootstrap test was utilized. Although green employee attitudes mediate the effect of green training and development on organizational citizenship behavior, this indirect effect is not significant. The relationships among green training and development, green citizenship behavior, and employee attitudes are also influenced by additional factors.

Keywords: *Green Training and Development, Green Employee Attitudes, Green Organizational Citizenship Behavior*

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Introduction

In Sri Lanka, the apparel manufacturing sector is the major contributor to the Sri Lankan economy. Sri Lankan apparel and ethical brands are aligned closely with a strong focus on sustainability by incorporating its entire production, supply chain and human resources as well with the initiative of “garments without guilty.

According to energy analysis by the Sri Lanka Sustainable Energy Institute, consumes about 14% of the total energy used by all industries. Additionally, industry and commerce provide approximately 60% of the electricity used in the country. Carbon dioxide represents the majority of greenhouse gasses associated with climate change and global warming. From 1960 to 2021, Sri Lanka's greenhouse gas emissions averaged 8810.48 KT and reached an all-time high of 25510. In 2019, it was 66 KT, and in 1960, it fell to 2258.87 KT. Between 1880 and 2013, the average of all the world's oceans showed an annual average increase of 0.06. However, since 1993, the average sea level has increased by 0.12 to 0.14 inches per year, nearly double the long-term trend. In Sri Lanka, Leading apparel manufacturers are focusing on green initiatives at every stage including reducing energy and water consumption.

Today organizations are becoming increasingly aware of the environment and are taking important steps to take sustainable measures. These measures include the use of energy-efficient technologies, waste reduction, supply chain optimization and the application of circular economy principles. At present, contemporary organizations are focusing on the importance of adopting environmental and green initiatives within the organization. This recognition has led to a trend where organizations are acknowledging the importance of environmentally responsible behaviors.

Problem Statement

Today, organizations are investing more resources in environmental training and development initiatives. While significant and huge investments are made in green training and development initiatives within the organizational context, there is a significant discrepancy between the employee knowledge and skills towards the environmental initiatives acquired by these programs and their actual adoption of organizational citizenship behavior towards the environment. On the other hand, employees are educated about the importance of greening, but their behaviors don't indicate environmentally responsible behavior. Therefore, it shows that simply offering training and development is not enough. It shows that it's a critical challenge for organizations when investing in environmental training and development practices. As well as this lack of green behavior led to direct environmental consequences such as increased pollution, resource consumption and carbon emissions.

Accordingly, the **research question**, 'What is the impact of green training and development on green organization citizenship behavior with the mediating effect of employee green attitudes?' could be raised.

Opatha et al. (2020) highlight significant empirical gaps in previous research regarding the relationship between green attitudes and various types of green behaviors, such as official, interpersonal, organizational citizenship, and personal behaviors. These gaps underscore the need for further investigation. Additionally, prior studies have not thoroughly explored green attitudes as a mediating factor in the relationship between HRM's green orientation and different forms of green behavior, as documented by Opatha et al. (2020). This gap exists both empirically and theoretically. In their research on the Sri Lankan tile industry, Opatha and Kottawatta (2020) found a positive and significant relationship between Green HRM and employees' green attitudes, emphasizing that green training exerts the strongest influence on green attitudes. However, their study did not specifically focus on green

training and development as the primary independent variable. Similarly, Yogendran and Priyashantha (2022) investigated the impact of Green HRM on employee green behavior with a focus on green attitudes at an IT company in Sri Lanka. They found a positive and significant effect of green attitudes on green behavior, highlighting that both green training and development and green attitudes directly influence green behavior. Nonetheless, their study did not specifically prioritize green training and development as the independent variable nor did it primarily address green organizational citizenship behavior as a key outcome variable.

Aoyagi-Usui et al. (2003) noted that existing research on environmentally friendly and green behavior among employees has predominantly focused on Western perspectives. However, environmental beliefs, values, and attitudes vary globally due to regulatory and cultural differences. Statistics from the World Bank indicate that the apparel industry is the largest labor-intensive manufacturing sector in South Asia. Despite this, there is limited research conducted within this industry and geographical context. While previous studies have demonstrated the influence of green training and development on changing employee green behaviors and attitudes, there remains a scarcity of research that specifically examines green training and development as an independent variable. Consequently, there are significant empirical gaps in the literature, with many researchers concentrating on exploring the relationship between Green HRM and employee green behaviors. Yet, there remains a notable absence of studies investigating the relationship between green training and development and various types of green behaviors, as well as employee green attitudes, particularly within the apparel industry and the South Asian context. This research aims to contribute to the evolving literature in this field by addressing these aforementioned empirical research gaps.

Therefore, the primary objective of this research study is to address this central problem by investigating how organizations can bridge the gap between green

training and development practices and employees' consistent exhibition of green organizational citizenship behavior effectively with the influence on green employee attitudes.

Objectives

The main goal of this research study is to explore how green training and development influences green organizational citizenship behavior, while considering the mediating role of green employee attitudes. This investigation specifically targets a prominent apparel manufacturing company located in Sri Lanka.

General Objectives:

- To examine the impact of green training and development on green organizational citizenship behavior.
- To study the relationship between the impact of green training and development on green employee attitudes.
- To explore the connection between the impact of green employee attitudes on green organizational citizenship behavior.
- To identify the role of green employee attitudes on influencing the relationship of green training and development on green organizational citizenship behavior.

Specific Objectives

- To conduct a systematic review of existing literature on Green Training and Development, Green organizational citizenship behavior, and Green Employee Attitudes aiming to identify existing research gaps for future research.

- To identify demographic differences among the employees in the Sri Lankan apparel industry.

Literature Review

Green Organizational Citizenship Behavior: Dependent Variable

As outlined by Opatha and Arulrajah (2014), Green HRM can be divided into four distinct categories, namely green competencies, green attitudes shown by employees, green behaviors in their actions, and the green outcomes and results achieved.

Green behavior is one of the most important human resource requirements and green behavior has three dimensions such as Green organizational citizenship behavior, Green interpersonal citizenship behavior and Green official behavior. Boiral (2009) defines that “Organizational Citizenship Behavior for the Environment ” is based on organizational citizenship behavior. According to Robbins et al. (2010), Organizational Citizenship Behavior (OCB) encompasses discretionary actions that go beyond job requirements and are not formally rewarded by employers. Boiral and Paille (2012) similarly observe that OCB involves voluntary efforts that are not explicitly mandated by the job requirements. Opatha (2013) defines Green organizational citizenship behavior as the extent to employee involvement in positive activities that are intended to serve the organization to carry out green initiatives. These activities do not require official job necessities and mainly they are considered as voluntary green activities of employees.

Opatha (2019) defines green organizational citizenship behavior as the voluntary involvement of employees in activities aimed at supporting green goals and objectives. Employees willingly take on roles such as conservationist, preservationist, non-polluter, and maker. Additionally, Opatha and Kottawatta (2020) measured green organizational citizenship behavior using three specific

indicators such as conscientiousness, sportsmanship, and civic virtue out of the five dimensions of organizational citizenship behavior (OCB).

Studies by Lin et al. (2015) and Zhang et al. (2018) indicate that factors such as individual environmental awareness, leadership style, organizational environment, and external social environment significantly influence individuals' organizational citizenship behaviors for the environment (OCBE). In their research, Liu et al. (2019) examined the relationship between Green HRM, green organization identity (GOI), environmental values, and organizational citizenship behaviors for the environment (OCBEs) across three manufacturing enterprises in China. They found that Green HRM positively impacts OCBEs. Moreover, they discovered that green organization identity (GOI) mediates the relationship between Green HRM and OCBEs, while environmental values moderate the effect of Green HRM on organizational identity and OCBEs.

Green Training and Development: Independent Variable

Cook and Seith (1992) first proposed the concept of Green Training and Development, which focuses on providing environmental training across various organizational levels, from employees to managers. According to Garavan et al. (1995), training is described as a systematic and planned effort to enhance knowledge, skills, and attitudes through learning experiences, aimed at improving performance in specific activities. Thus, Jabbour et al. (2010) assert that green training in this context involves policies designed to equip employees with essential knowledge, practices, and attitudes necessary for environmental initiatives.

According to Aragon–Correa (1998) environmental training as the necessary tool to indicate the environmental performance of an organization. Furthermore, Cole et al. (2008) suggests that environmental training is deemed essential because it is equipping employees with the requisite skills to conceive and implement innovative environmental management initiatives. These initiatives, in turn, exert a positive

influence on the environmental performance of the organization. Wehrmeyer (1996) underscores the pivotal role of environmental training in effective implementation of environmental management within organizations.

Also, Opatha et al. (2015) suggests that environmental training plays a significant aspect to enhancing employees concerned toward the environment. According to North (1997), conducting seminars and workshops to create environmental awareness among employees to promote "environmental awareness" among the workforce is important to achieve environmental performance of an organization. This environmental training will lead to a change in the behavior and attitudes of both managerial and non-managerial level employees. Renwick et al. (2008) and Renwick et al. (2013) suggest innovative approaches such as training of employees to conduct green analysis at workplace, use of job rotation to groom future green managers and training in various aspects of environmental management initiatives such as recycling, safety, waste management and energy efficiency. According to Jackson and Seo (2010), Green training is widely recognized as an important organizational and human resource element, and Renwick et al. (2013) emphasize that green training is widely regarded as a crucial practice within Green Human Resource Management.

Ramus (2002) shows that HR processes such as learning and training related to the environmental aspect by creating a favorable green culture for the organization in which employees feel that employees were the part of the conversional outcomes, and these aspects contribute to achieving environmental goals. Furthermore, according to May and Flannery cited in Ajenthiny (2020) training and development are widely used Green HRM initiatives, to increase employee awareness of environmental impacts of their organization's processes. According to Jabbar and Abid (2014), even if employees are motivated towards organizational green performance, training would be needed to implement those policies.

Arulrajah et al. (2015) emphasize that an organization cannot achieve its environmental objectives without adequate environmental training. It is essential to underscore that the absence of comprehensive environmental training renders an organization incapable of attaining its environmental objectives as highlighted by Arulrajah et al. (2015). Scholarly discourse underscores that environmental training and education significantly augment employees' capabilities to make substantial contributions to environmental management endeavors, as posited by Ramus (2002) and further corroborated by Renwick et al. (2008). Jabbar and Abid (2014) have also advanced the notion that environmental training serves to elevate employees' motivation levels with respect to eco-initiatives and the environmental performance of the organization.

As articulated by Cole et al. (2008) Environmental training plays a pivotal role in enhancing employees' skills to initiate innovative environmental management initiatives. These initiatives, in turn, exert a positive influence on the environmental performance of the organization. It is essential to underscore that the absence of comprehensive environmental training renders an organization incapable of attaining its environmental objectives, as highlighted by Arulrajah et al. (2015). Thevanes and Arulrajah (2020) investigated the relationships between environmental training, environmental behavior of employee and environmental orientation of organization and with the mediating effect of environmental behavior of employee on the relationship among environmental training and environmental orientation of organization. The findings of this study indicate that environmental training programs have a positive impact on employees' green behavior.

Green Employee Attitudes: Mediating Variable

Environmental attitude is defined by Perlstring (1997) as learned tendencies that manifest as consistent behaviors that are either positive or negative toward the environment. Kempton et al. (1995) argue that green attitudes inspired by ethical and religious values, pragmatic and anthropocentric orientations and biocentric beliefs, All living organisms have the right to exist and survive. According to Milfont and Duckitt (2010) environmental attitudes are the mental propensity that people express when they evaluate responses to the environment, with favorably or unfavorably. "Green Human Resource Management: A Simplified Introduction" by Opatha (2013) provides an overview of the concept of Green Human Resource Management (GHRM). The concept of Green Attitude refers to an individual's beliefs, feelings, and behaviors related to environmental sustainability and eco-friendly practices. It encompasses three key aspects: cognitive, affective, and behavioral.

Hewapathirana et al. (2020) defines green attitudes as an individual who is supposed to be a green person, genuinely should believe in greening, exhibit a positive and engaged attitude towards greening and demonstrate a positive and serious behavioral alignment towards greening. As well as the individual's attitude should be complete cognitively, affectively, and behaviorally. According to Ojo et al. (2022) and Ojo and Fauzi (2020) states that environmental attitudes will contribute to better favorable outcomes for sustainability and environmental performance. Positive environmental attitudes are associated with environment responsible behavior and this support to achieve better results in environmental performance and sustainability. According to Priyashantha and Yogendran (2022) states GHRM affects green behaviors through employees' attitudes. The results indicate that the study's hypotheses were supported, showing that GHRM indeed impacts green behavior through employees' green attitudes. This suggests that GHRM influences employees' attitudes, leading to more eco-friendly behaviors.

Environmental training encourages the cultivation of proactive attitudes toward environmental concerns, as noted by Carter and Dresner (2001). Furthermore, scholarly research by Renwick et al. (2013), Opatha and Arulrajah (2014), Ahmad (2015), and Das and Singh (2016) underscores the positive impact of environmental training on enhancing environmental attitudes. According to Shaban (2019) Employee motivation for green application is greatly influenced by financial and non-financial incentives.

According to Pham et al. (2019), the use of green HR practices, such as green training, green rewards and green organizational culture, has a significant impact on the level of employees' commitment to environmental initiatives. Bashirun and Noranee (2020) conducted a study to explore the influence of environmental knowledge and attitude on employee green behavior in a private organization in Malaysia. But this study states that there is no relationship between environmental knowledge and environmental attitude on employee green behavior.

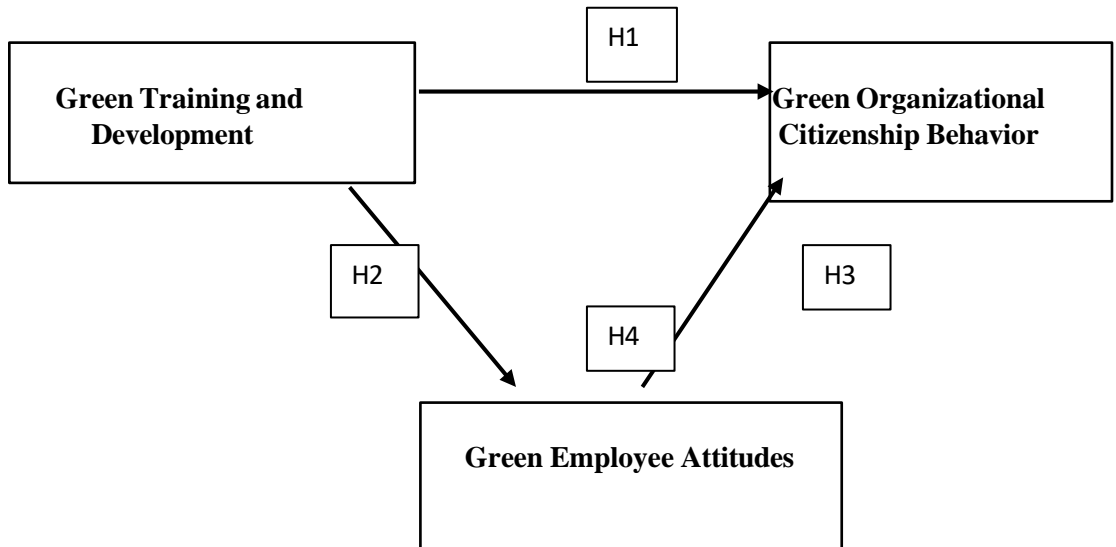
Research Design

This research is quantitative with minimal researcher interference. It uses an exploratory design and descriptive research to detail the characteristics of the employee group and the unit of analysis is individual.

Conceptual Framework

Figure 1

Conceptual Framework



Source: Author, 2023

Hypotheses of the Study

H1: There is a significant direct impact of green training and development on green organizational citizenship behavior.

H2: There is a significant direct impact of green training and development on green employee attitudes.

H3: There is a significant direct impact of green employee attitudes on green organizational citizenship behavior, controlling for green training and development.

H4: The indirect effect of green training and development on green organizational citizenship behavior through green employee attitudes is significant.

Selection of Population and Sample

The population comprised 150 executives and above level employees from a specific apparel sector company in Sri Lanka and the sample size for this study includes 108 executives and above level employees. This category encompasses Executives, Assistant Managers, Deputy Managers, and General Managers. The sample was determined using the Morgan table and the Ruskin model, which base sample size on statistical principles. Simple random sampling was employed to ensure unbiased selection.

Data Collection

This research utilized both primary and secondary data. Primary data were collected through a questionnaire, which was developed and then distributed to the target respondents as part of a structured survey. Secondary data were gathered from existing literature relevant to the study. The questionnaire, based on this literature, was personally administered by the researcher using a random sampling approach.

The questionnaire included demographic factors such as gender, age, educational level, and period of service in the current job. To measure green training and development, green employee attitudes, and green organizational citizenship behavior, a five-point Likert scale was used, with 1 indicating "strongly disagree" and 5 indicating "strongly agree."

Methodology to Analyze Data

This research was designed as a cross sectional research study with the quantitative research approach. According to Krejcie & Morgan table figures, 108 responses were collected from the whole sample by distributing a questionnaire survey and using a simple random sampling method. Furthermore, those primary data analyzed using SPSS version 25 and correlation and regression analyzes.

Reliability of the Measures

Table 1

Reliability Statistics

Variables	Cronbach's Alpha	No. of Items
Green Training and Development	.874	8
Green employee' attitudes	.648	6
Green organizational citizenship behavior	.628	10

Source: Analyzed data, 2023

Based on the Cronbach's alpha test, the reliability coefficient for Green Training and Development (GTD) is 0.874, which indicates a high level of internal consistency. This measurement was derived from 8 items. The Green Employee Attitudes (GEA) scale, measured with 6 items, has a Cronbach's alpha value of 0.648. Similarly, the Green Organizational Citizenship Behavior (GOCB) scale, assessed with 10 items, also has a Cronbach's alpha value of 0.648. Both values for GEA and GOCB are above the 0.6 threshold, signifying acceptable reliability.

Response Rate

Table 2

Response Rate

Delivered	Completed	Incomplete	Usable	Response rate
150	113	5	108	72%

According to analysis in the above-mentioned table, the response rate is 72%.

Sample Description

Table 3

Sample Composition

Gender	Male	61	56.5%
	Female	47	43.5%
Age	21 – 25 years	25	23.1%
	26 – 30 Years	42	38.9%
	31 – 35 Years	18	16.7%
	36 – 40 Years	11	10.2%
	41 Years and Above	12	11.1%
Educational Level	Professional qualifications	24	22.2%
	Degree	57	52.8%
	Post Graduate Diploma	10	9.3%
	Master' Degree	16	14.8%
Period of service year	Less than 1 Year	21	19.4%
	1 – 2 Years	23	21.3%
	3 – 4 Years	22	20.4%
	More than 4 Years	42	38.9%

Source: Analyzed data, 2023

In Sri Lanka where female representation in executive and above positions in the apparel sector remains lower. Therefore, those findings interpret the trend that male professionals occupy a higher percentage of executive and above positions represents a significant challenge in achieving gender diversity.

According to the age distribution analysis, a significant portion, consisting of 38.9% of the sample, falls within the 26 to 30 age category. This shows that the company consists of new energy and talent by recruiting young professionals. As well as 16.7% of respondents fall into the ages of 31 to 35 and this shows mid-career individuals of the company. The age group between age 21 to 25 employees shows 23.1% percentage, representing the second highest percentage but noteworthy representation of fresh and young blood employees. The multi-faceted age distribution represents the company's efforts to blend young bloods with experienced professionals in the Sri Lankan apparel industry.

The education distribution of executive and above employees in the Sri Lankan apparel sector is diverse, reflecting both academic and professional qualifications. The majority of employees hold a bachelor's degree and a significant number of employees having master's degrees or postgraduate diplomas indicates further attainment for advanced studies and continuous learning and skills development. This diverse educational background of executives and above employees in the Sri Lankan apparel sector indicates that they are well educated and their expertise contributes to the overall competitiveness of the apparel industry in Sri Lanka.

According to period of service years distribution of the respondents, there is a significant portion of employees has been in company for more than 4 years of period and indicating a significant stability of executive and above employees. Furthermore, there is a significant number of individuals with service periods less than 1 year and 1 – 2 years, but this also indicates a bit turnover ratio.

Descriptive Statistics

Tables 4

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
GTD	108	2.38	5.00	4.0174	.53729
GEA	108	3.17	5.00	4.0972	.40578
GOCB	108	3.00	5.00	4.0630	.38925
Valid N (listwise)	108				

Source: Analyzed data, 2023

The above table shows the mean value of the GTD is 4.0174 while the value of standard deviations is 0.53729. Next, the mean value of the GEA is 4.0972 while the value of standard deviation is 0.40578. The mean value of the GOCB is 4.0630 while the value of standard deviation is 0.38925. It can be identified that the level of agreement of the respondents for each variable is high.

Correlation Analysis

Tables 5

Correlation Statistics

		GTD	GEA	GOCB
GTD	Pearson Correlation	1	.602**	.364**
	Sig. (2-tailed)		.000	.000
	N	108	108	108

GEA	Pearson Correlation	.602**	1	.368**
	Sig. (2-tailed)	.000		.000
	N	108	108	108
GOCB	Pearson Correlation	.364**	.368**	1
	Sig. (2-tailed)	.000	.000	
	N	108	108	108

Source: Analyzed data, 2023

The Pearson correlation coefficient for Green Training and Development (GTD) and Green Organizational Citizenship Behavior (GOCB) is 0.364, indicating a positive relationship. The significance value is 0.000, demonstrating that this relationship is statistically significant.

The Pearson correlation coefficient for GTD and Green Employee Attitudes (GEA) is 0.602, also indicating a positive relationship. The significance value is 0.000, showing a significant relationship.

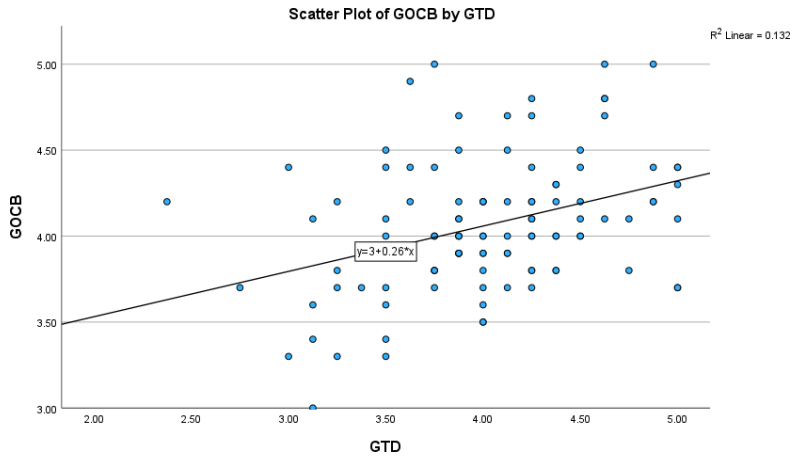
The Pearson correlation coefficient for GEA and GOCB is 0.368, indicating a positive relationship. The significance value is 0.000, which is less than 0.05, confirming that this relationship is statistically significant.

Regression Analysis

H01 - There is a significant direct impact of GTD on GOCB.

Figure 2

Scatter plot for GTD and GOCB



Source: Analyzed data, 2023

Linear curve in the scatter plot is derived as upward from left to right by showing the positive relationship among GTD and GOCB.

Table 6

Model of summary table for H2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig.F Change	
1	.364 ^a	.132	.124	.36426	.132	16.184	1	106	.000	1.809

a. Predictors: (Constant), GTD

b. b. Dependent Variable: GEA

Source: Analyzed data, 2023

According to the model summary table, the R-squared value is 0.132, indicating that Green Tra Development (GTD) can explain 13.2% of the variation in Green Organizational Citizenship (GOCB). The adjusted R-squared value is 0.124.

Table 7

Anova for H1

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.147	1	2.147	16.184	.000 ^b
	Residual	14.064	106	.133		
	Total	16.212	107			

a. Dependent Variable: GOCB

b. Predictors: (Constant), GTD

Source: Analyzed data, 2023

According to the provided table, the F value is 16.184, which is significant at the 0.000 level. This F value assesses the overall fit of the regression model for the data. These results suggest that the model does not have a strong fit with the data.

Table 8

Coefficients for H1

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.004	.266		11.308	.000
	GTD	.264	.066	.364	4.023	.000

a. Dependent Variable: GOCB

Source: Analyzed data, 2023

Based on the coefficient values in the above table, the regression equation of the GOCB can be constructed as follows;

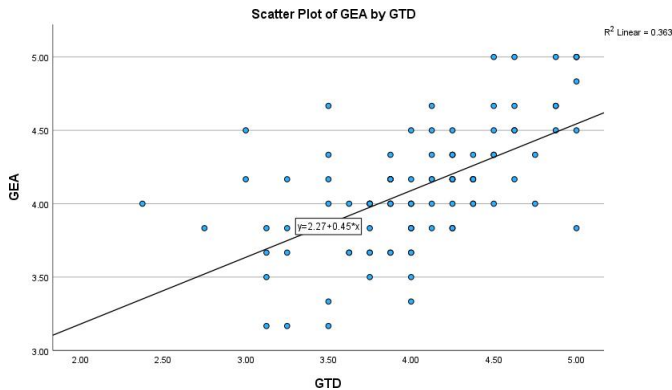
$$Y=3.004+0.264 \text{ GTD}$$

Considered in the analysis, GTD significantly impacts on GOCB (0.000, $p>0.05$). p-value (0.000) is less than 0.05, showing that the relationship between GTD and GOCB is statistically significant. When GTD increases from one-unit, GOCB will increase by 0.264. Therefore, H1 was supported.

Hypothesis 02 - There is a significant direct impact of GTD on GEA.

Figure 3

Scatter plot for GTD and GEA



Source: Analyzed data, 2023

According to the figure 3 Scatterplot, there is an approximate linear association between GTD and GEA, and a linear regression line / equation could be established. Linear curve in the scatter plot is derived as upward from left to right by showing the positive relationship among GTD and GEA.

Table 9

Simple Linear Regression Statistics for H2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. Change	
1	.602 ^a	.363	.357	.32549	.363	60.293	1	106	.000	2.039

a. Predictors: (Constant), GTD

b. Dependent Variable: GEA

Source: Analyzed data, 2023

According to the model summary table, R square value is 0.363 and it indicates that GTD ca 36.3% of variation in green employee attitude. It means there were several factors that influence employee attitude, not only GTD. The adjusted R Square value was 0.357.

Table 10

Anova for H2

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	6.388	1	6.388	60.293	.000 ^b
Residual	11.230	106	.106		
Total	17.618	107			

a. Dependent Variable: GEA

b. Predictors: (Constant), GTD

Source: Analyzed data, 2023

Based on the table, the F value is 60.293 and is significant at the 0.000 level. The F value evaluates whether the overall regression model appropriately fits the data. The results suggest that the model does not have a strong fit with the data.

Table 11

Coefficients for H2

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.270	.237		9.565	.000
	GTD	.455	.059	.602	7.765	.000

a. Dependent Variable: GEA

b. Predictors: (Constant), GTD

Source: Analyzed data, 2023

Based on the coefficient values in the above table, the regression equation can be constructed as follows;

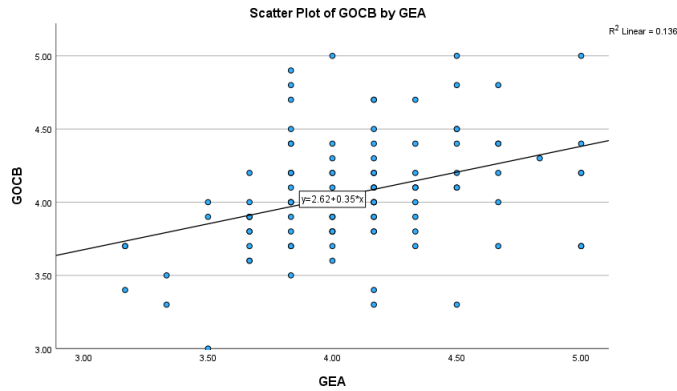
$$\text{GEA} = 2.270 + 0.455 \text{ GTD}$$

According to the above analysis, GTD significantly impacts GEA (0.000, $p > 0.05$). p-value (0.000) is less than 0.05, shows that the relationship between variables is statistically significant. When GTD increases from one-unit, GEA will increase by 0.455. This indicates a positive relationship between above two variables, as a result, H2 was supported.

Hypothesis 03: The significant direct impact of GTA on GOCB, controlling for GTD.

Figure 4:

Scatter plot for GEA and GOCB



Source: Analyzed data, 2023

According to Scatterplot, there is an approximate linear association between GEA and GOCB, and a linear regression line / equation could be established. Linear curve in the scatter plot is derived as upward from left to right by showing a positive relationship.

Table 12

Simple Linear Regression Statistics for H3

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.368 ^a	.136	.127	.36361	.136	16.621	1	106	.000	1.669

a. Predictors: (Constant), GEA

b. Dependent Variable: GOCB

Source: Analyzed data, 2023

According to the model summary table, R square value is 0.136 and it indicates that green employee attitude can explain 13.6% of variation in GOCB. It means there were several factors that impact on GOCB, not only GEA. The adjusted R Square value was 0.127.

Table 13

Anova for H3

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.198	1	2.198	16.621	.000 ^b
	Residual	14.014	106	.132		
	Total	16.212	107			

a. Dependent Variable: GOCB

b. Predictors: (Constant), GEA

Source: Analyzed data, 2023

Based on the table, the F value is 16.621 and is significant at the 0.000 level. The F value assesses the adequacy of the overall regression model for the data. The results suggest that the model does not exhibit a strong fit with the data.

Table 14:

Coefficient statistics for H3

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.616	.357		7.335	.000
	GEA	.353	.087	.368	4.077	.000

a. Dependent Variable: GOCB

Source: Analyzed data, 2023

Based on the coefficient values in the above table, the regression equation can be constructed as follows,

$$\text{GOCB} = 2.616 + 0.353 \text{ GEA}$$

According to the above analysis, green employee attitude significantly impacts on GOCB (0.000, $p > 0.05$) and shows that the relationship between GEA and GOCB is statistically significant. When GEA increases from one-unit, GOCB will increase by 0.353. This indicates a positive relationship between above two variables and as a result, H3 was supported.

Hypothesis 04: The indirect effect of green training and development on green organizational citizenship behavior through employee green attitudes is significant.

The bootstrap test results are as follows:

Y: GOCB

X: GTD

M: GEA

Sample Size: 108

Table 15

Total, direct and indirect effects of X on Y

Total effect of X on Y					
effect	se	t	p	LICI	ULCI
.2637	.0655	4.0230	.0001	.1337	.3936
Direct effect of X on Y					
effect	se	t	p	LICI	ULCI
.1617	.0808	2.0008	.0480	.0015	.3219
Indirect effect(s) of X on Y:					
GEA effect	Boot SE	Boot LICI	Boot ULCI		
.1020	.0581	-.0044	.2262		

Level of confidence for all confidence intervals in output: 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

Source: Analyzed data, 2023

The estimates show GTD's positive effect on green organizational citizenship behavior $B = 0.2637$, $p < 0.001$, CI (0.1337, 0.3936). The GTD directly positively affects GOCB. $B = 0.1617$, $p > 0.001$, CI (0.0015, 0.3219). It shows that with one unit increase in GTD there will be 0.1617 units of positive changes in the GOCB.

The estimates suggest that the indirect effect of green training and development on green organizational citizenship behavior (GOCB) through green employee attitudes (GEA) is 0.1020, with a p value greater than 0.001 and a confidence interval (CI) of -0.0044 to 0.2262. This indicates that GEA positively mediates the relationship between green training and development and GOCB. However, since the p value is

greater than 0.001, this effect is not statistically significant. Therefore, the hypothesis H4, which proposed that the indirect effect of green training and development on GOCB through GEA is not significant and H4 was not supported.

Table 16

Summary of Hypothesis Testing

Hypothesis	Supported/Not Supported
H1: There is a significant direct impact of GTD on GOCB.	Supported
H2: There is a significant direct impact of GTD on GEA.	Supported
H3: There is a significant direct impact of GEA on GOCB, controlling for GTD.	Supported
H4: The indirect effect of GTD on GOCB through GOCB is not significant.	Not Supported

Results

In this research study, the research objectives were achieved as follows:

The below-mentioned general objectives of this research study were achieved, based on the statistical data analyses.

- To examine the impact of green training and development on green organizational citizenship behavior.

The statistical analysis reveals a significant and positive relationship between green training and development (GTD) and green organizational citizenship behavior (GOCB).

- To study the relationship between the impact of green training and development on green employee attitudes.

Based on the data analysis, it was determined that there is a positive and significant relationship between green training and development (GTD) and green employee attitudes (GEA).

- To explore the connection between the impact of green employee attitudes on green organizational citizenship behavior.

Based on the statistical data analysis, it was identified that there exists a significant and positive relationship between green employee attitudes (GEA) and green organizational citizenship behavior (GOCB), while controlling for green training and development (GTD).

- To identify the role of green employee attitudes on influencing the relationship of green training and development on green organizational citizenship behavior.

The findings of this study indicate that the indirect effect of green training and development on green organizational citizenship behavior, mediated by green employee attitudes, is positive. However, this mediation effect is not statistically significant.

Following specific objectives have been achieved:

- To conduct a systematic review of existing literature on Green Training and Development, Green organizational citizenship behavior, and Green Employee Attitudes aiming to identify existing research gaps for future research.

In this research study, after a thorough review of relevant literature, identified gaps, inconsistencies, and areas lacking sufficient research in the

fields of green training and development, green organizational citizenship behavior, and green employee attitudes in the literature review.

- To identify demographic differences among the employees in the Sri Lankan apparel industry.

By collecting demographic data from selected sample, examined differences in characteristics such as gender, age, education level and period of service years. Male professionals occupy a higher percentage of executive and above positions represents a significant challenge in achieving gender diversity. The multi-faceted age distribution represents the company's efforts to blend young bloods with experienced professionals in the Sri Lankan apparel industry. Also, The education distribution of executive and above employees in the Sri Lankan apparel sector shows as diverse, reflecting both academic and professional qualifications. Educational levels are also good. This diverse educational background of executives and above employees in the Sri Lankan apparel sector indicates that they are well educated and their expertise contributes to the overall competitiveness of the apparel industry in Sri Lanka.

Findings and Discussion

Findings of this study are explained by the previous data analysis results that researcher generated by using the SPSS data analysis package. Discussions and findings are related to the literature review chapter and intended to provide possible justification for relationships between the variables of the conceptual framework. This current research study is based on the research objectives which are established with the beginning of this research study. Researcher main goal of this study was to assess the impact of green training and development on green organizational citizenship behavior through green employee' attitudes at selected apparel sector company in Sri Lanka. At present many contemporary organizations are

implementing training and development initiatives towards green and eco-friendly initiatives due to business impacts on the planet. But while companies are making huge investments on employee' green training and development program, their green behavior change is less. Therefore, the researcher has conducted thorough investigation about the existing literature related to green training and development, green employee' attitudes and green organizational citizenship behavior.

In their correlation analysis, Pham et al. (2018) discovered that green training has a significant positive impact on employees' voluntary green behavior in the Vietnamese hotel industry. Similarly, Thevanes and Arulrajah (2020) identified a significant positive relationship between environmental training and the environmental behavior of employees in the apparel sector in Batticaloa and Polonnaruwa, Sri Lanka. However, the current study found that while the relationship between green training and development (GTD) and green organizational citizenship behavior (GOCB) is significant, it is characterized by a weak correlation.

Zoogah (2011) noted that training and development initiatives can help maintain employees' environmental management knowledge, skills, and attitudes. Additionally, Opatha and Kottawatta (2020) found a positive and significant relationship between Green HRM and employees' green attitudes, with green training having the most substantial impact in the Sri Lankan tile industry. However, the current research reveals that while the impact of green training and development (GTD) on green employee attitudes (GEA) is also positive and significant, the correlation is weak. This suggests that other factors influence the relationship between these two variables.

The third hypothesis developed is that the impact of green employee attitudes (GEA) on green organizational citizenship behavior (GOCB), while controlling for green training and development (GTD), is significant and positive. Scherbaum et al. (2008) found that environmental attitudes significantly influence employee green

behaviors. Additionally, Murtagh et al. (2013) indicated that attitudes have a notable impact on energy-saving behavior. However, the results of the third hypothesis test in this study show that while GEA significantly and positively impacts GOCB, controlling for GTD, the correlation is weak. This suggests that other factors influence the relationship between these variables. The fourth hypothesis posited that the indirect effect of GTD on GOCB through GEA is significant. The findings reveal that green employee attitudes do positively mediate the relationship between GTD and GOCB, but this mediation effect is not significant.

Therefore, The findings of this research study showed that the green employee' attitudes positively mediating the indirect effect between green training and development and green organizational citizenship behavior is positive, but it is not significant in the selected research domain. Moreover, as a conclusion, according to demographic data, In Sri Lankan apparel sector there are a higher number of male executives and above employees. Female representation is low. As well as in Sri Lankan context, executive and above employees' educational levels are also at a good level. As well as the majority of executives and above employees are young blood.

Conclusion

The study identified a significant but weak positive relationship between green training and development (GTD) and green organizational citizenship behavior (GOCB). Additionally, it found a significant positive relationship between GTD and green employee attitudes (GEA), as well as between GEA and GOCB. The study also examined the indirect effect of GTD on GOCB through GEA. Furthermore, it addressed gaps in the existing literature on green training and development, gender diversity, and demographic differences in the Sri Lankan apparel manufacturing sector. This research enhances understanding of these relationships and provides insights into demographic characteristics.

Limitations

Few limitations identified in this research study. First implication is this is a cross sectional study and researcher collected data from sample at a single point in time. Therefore, when assessing the impact of green training and development on changing employee' green organizational citizenship behavior, need to assess for a considerable time period while examining the normal and control group of samples. Moreover, as a theoretical implication, this research study investigates the impact of green training and development on green organizational citizenship behavior with the mediating effect of green employee' attitudes. As well, need to address the moderating effect of green employee' attitudes and other factors affecting those variables. As well as need to analyze the other two types of green behaviors such as green interpersonal citizenship behavior and green official behavior as a dependent variable.

As a practical implication, it can be stated as this research study sample has taken as executive and above employees at an apparel manufacturing company and it's not covering the executive and below employee category. This is also a considerable limitation of this research study. Furthermore, this research study has been conducted in the apparel industry and can be conducted in different industries as well.

Research Gaps and Directions for Future Researchers

Numerous factors influence green employee attitudes and green organizational citizenship behavior. Hence, future research could explore the mediating and moderating roles of variables like green organization identity (GOI), environmental values, individual environmental awareness, leadership styles, organizational culture, external social influences, and employee motivation levels toward green initiatives. This exploration would enrich understanding of how green human

resource practices relate to various types of green behaviors, such as green organizational citizenship behavior, green interpersonal citizenship behavior, and green official behavior. Future studies might also delve into other aspects of green HR practices, such as green rewards management and green performance evaluation. As we advance into the technology era, there is a need to adapt green training and development programs to incorporate AI technologies, considering that future trainers and trainees may have AI-based educational experiences Weerasinghe, R. (2023).

Furthermore, future researchers should consider qualitative research methods to complement the findings of quantitative studies. Conducting such studies could enhance the effectiveness of green training and development initiatives by identifying specific factors that contribute to weaker correlations among variables.

Practical Implications for HR Professionals

This research aims to understand the effectiveness of environmental training programs in business organizations, focusing on employee behavior towards the environment. It can lead to enhanced green initiatives and reduced environmental impact. The findings can be used by managers and HR professionals to implement more effective training programs to reduce ecological footprints, promoting sustainability, and reducing energy and resource consumption.

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