
The Impact of Green Training and Development and Perceived Environmental Responsibility on Green Behaviour at Work in the Banking Sector in Sri Lanka

S.K. Chandrakumar ^{a,*}, N. Kogularamanan ^b

^a *Department of Human Resources Management, Faculty of Management, University of Peradeniya*

^b *Department of Accounting, Faculty of Management Studies and Commerce, University of Jaffna*

A B S T R A C T

Green behaviour among employees has become critical in the sustainability of an organization, especially to the green sensitive sectors such as banking. Although there are increasing green initiatives, there is a lack of empirical evidence on the role of Perceived Environmental Responsibility and green training and development in terms of this behaviour within the Sri Lankan banking industry. In this study, the effect of perceived environmental responsibility and green training and development on Employee green behaviour is explored with the mediating role played by PER. Adopting a positivist paradigm and deductive approach, the study uses a quantitative cross-sectional survey. The sample consisted group of 240 employees of licensed commercial banks in Sri Lanka. A five-point Likert scale questionnaire in the form of a structure, where the measures were modified based on previous studies of a validated variant. Partial Least Squares Structural Equation Modelling (PLS-SEM) through SmartPLS4 was used to analyze the data. The results show that PER and GTD have a positive and significant impact on EGB. GTD also affects the PER that mediates the relationship between GTD and EGB to some extent. The study emphasizes the need to improve employee perceptions and training programs to improve sustainability efforts in banks, which adds to the literature of connecting organizational practices and employee perceptions to a single model and provides practicability implications on how to enhance workplace green behaviour.

Keywords: Banks, Employee green behavior, Green training and development, Perception of environmental responsibility, Sri Lanka

1. Introduction and Research Problem

The rising environmental issues like climate change and depletion of resources have made environmental sustainability a top priority of organizations across the world. Organizations are supposed to inculcate the importance of being environmental responsible in their operations not only at the strategic level but also in the behavior of its employees. Employee green

* Corresponding author: kishok2002ck@gmail.com
15th ICME at University of Ruhuna, Sri Lanka
08th October 2026
ISBN: 978-624-6923-00-6

behaviour, which is an environment-friendly behaviour that is practiced by employees at the workplace, is an important factor in attaining organizational sustainability objectives (Renwick et al., 2013). Previous studies have shown that employees tend to be more inclined towards green behaviour when they believe that their organization is green. (Aminullah & Ekowati, 2025; Priyashantha & Yogendran, 2022).

Green Training and Development (GTD) is an important business practice that enhances environmental awareness and environmental knowledge of the employees. It does not only influence directly the behaviour of the employees, but it also results in their perception of the environmental responsibility of the organization. Through providing environmental training to employees, the employees enhance their perception of the commitment of the organization to sustainability, which boosts their perception and encourages green behaviour. Therefore, one of the most important factors, which green training influences, is employee behavior (Priyashantha and Yogendran, 2022).

In the case of Sri Lanka, the aspect of environmental sustainability is gaining attention especially in the banking sector, which contributes a major part to economic development (Shaumya & Arulrajah, 2016). Banks are also becoming more environmentally friendly by implementing paperless banking, energy saving, and green banking practices. (Aslam & Jawaid, 2022). It has empirically been proposed that the organisational environmental support has a positive impact on employee green behaviour in Sri Lankan banks, which leads to a better sustainability performance (Sivalingam and Arulrajah, 2022). The contribution of the perception of the employees towards the environmental responsibility is, however, less studied in this context (Sivalingam & Arulrajah, 2022).

The current body of empirical research points out that the perceived environmental corporate social responsibility can influence the employee green behaviour in a significant manner. As an illustration, (Aminullah & Ekowati, 2025) established a positive association between perceived environmental responsibility and employee green behaviour. The same research on green human resource management shows that the attitudes and perceptions of employees are the major causes of environmentally responsible behavior (Priyashantha & Yogendran, 2022). The results highlight the role of perception as a psychological determinant of behaviour.

This study employs Ability–Motivation–Opportunity (AMO) framework and the Theory of Planned Behavior (TPB) to explain the theoretical background. This study positioned Perceived Environmental Responsibility (PER) as a mediator in the relationship between Green Training and Development (GTD) and Employee Green Behaviour (EGB). Through lens of AMO perspective, GTD serves to increase essential ability to enhance the practice that equips employees with critical environmental knowledge, skills, and awareness. Furthermore, targeted environmental training effectively communicates the organization's sustainability objectives, subsequently strengthening the employees' internal conviction that environmental stewardship is an integral component of their professional and personal duties (Mona AlDana et al., 2026). Once this perception of responsibility is cultivated, the TPB explains how it translates into actionable workplace behaviors. Employees who possess a heightened sense of PER are more likely to develop favorable environmental attitudes and behavioral intentions (Mona AlDana et al., 2026).

Research questions of this study are:

1. How does Perceived Environmental Responsibility influence green behaviour at work in the Sri Lankan banking sector?
2. How does green training and development influence green behaviour at work?

3. How does green training and development influence Perceived Environmental Responsibility?
4. Does Perceived Environmental Responsibility mediate the relationship between green training and green behaviour?

This study is significant as it contributes to existing literature by addressing the identified gap and provides practical insights for banking institutions to enhance employee engagement in environmental sustainability initiatives. Although findings are available, few studies investigate the role of Perceived Environmental Responsibility in mediating employee green behaviour in the Sri Lankan banking industry as most studies conducted on the subject of green behaviour in the banking sector address the organisational practices and not employee perceptions (Sivalingam & Arulrajah, 2022). Hence, the study will analyze the impact of GTD and EGB, and the mediating variable of PER.

2. Research Methodology

2.1. Research Philosophy

The research is founded on the positivist research philosophy that believes that reality is objective and measurable by scientific means. Positivism is concerned with the examination of relationships between variables by quantitative data and statistical analysis. It enables the researcher to test hypotheses and make generalized findings founded on empirical data (Bryman, 2016).

2.2 Research Design

This research design is quantitative with a cross-sectional survey design. This study uses a quantitative method and Cross-sectional design in order to gather the information at one time. The survey was done on the employees of the operational level who are employed in the branches of the bank since they are the ones who are directly engaged in the activities and practices of the organization in the environment. The design is a common behavioural and organizational research design which is utilized to investigate the relationships between variables effectively.

2.3 Data Collection and Measurement

Primary data were obtained based on a structured self-administered questionnaire. A convenience sampling technique was employed to select participating branches of licensed commercial banks in Sri Lanka, primarily based on geographical accessibility and the willingness of branch management to grant access. Upon receiving the questionnaires, the data was cleaned, encoded into an Excel sheet and then subjected to analysis. The questionnaire had a total of fourteen items with five items each for the dependent and independent variables. All the measures were made on a five-point Likert scale. The measurement items were derived based on prior studies that were already in existence, to make them valid and reliable. In particular, PER items adopted from Parveen (2025), GTD items by Priyashantha and Yogendran (2022), and EGB items by Renwick et al. (2013).

Ethical considerations were respected during the data collection. The COPE regulations were followed stringently during data collection. Participants were informed about the purpose of the study, and informed consent was obtained prior to participation. Participants were free to participate and the information was anonymized and used solely for academic purposes (Badampudi et al., 2022). None of the respondent's sensitive data was collected and stored.

Based on the above conceptual framework, the following hypotheses were developed:

H1: Perceived Environmental Responsibility positively influences employee green behaviour.

H2: Green training and development positively influences employee green behaviour.

H3: Green training and development positively influences Perceived Environmental Responsibility.

H4: Perceived Environmental Responsibility mediates the relationship between green training and development and employee green behaviour.

2.4 Sample and Population

The target population of this study consists of all employees working in Banks in Sri Lanka. The sample size was determined using established guidelines for structural equation modelling. A sample size of 240 respondents was used in this study. This sample size is way more than the required sample size. Which satisfies the 10-times rule, according to which the sample size must be at least ten times the number of structural paths that may be directed to a construct (Hair et al., 2019). Also, the sample size can be deemed, it significantly exceeds the minimum sample size of 68 required by an a priori power analysis assuming a standard moderate effect size ($f^2 = 0.15$), a 5% significance level, and 80% statistical power.

2.5 Data Analysis

The collected data were analyzed using Partial Least Squares Structural Equation Modelling with SmartPLS4 software. The PLS-SEM is appropriate in this research since it can examine complex models with multiple relationships and its applicability to the prediction-based research (Hair et al., 2019).

The analysis was done in a two-step manner. The measurement model was first evaluated to determine the reliability and validity such as Cronbach's alpha, composite reliability, average variance extracted (AVE) and discriminant validity (HTMT). Second, the structural model was tested to examine the hypotheses based on path coefficients, R^2 values and level of significance.

The importance of relationships and mediation effects were tested by a bootstrapping procedure that has 5,000 resamples. It is a robust method of estimating and is generally suggested in PLS-SEM analysis (Hair et al., 2019).

3. Results

A total of 240 responses were collected and found to be suitable for analysis. The respondents represented employees from different banks and various levels of experience, providing a reliable dataset for analysis.

3.1 Measurement Model Assessment

SmartPLS4 was used in the evaluation of the measurement model (Sarstedt et al., 2024). A majority of the outer loadings were greater than the suggested limit of 0.70. Two of them, Perception of environmental responsibility ($PER_4 = 0.581$) and Employee Green Behavior ($EGB_4 = 0.597$) were below the desired threshold. Nevertheless, they were not dropped since their loadings were still over 0.40 and all of the AVEs were over 0.50, which is acceptable (Hair et al., 2019). The values of Cronbach's alpha and composite reliability were greater than 0.70, which reflects good internal consistency. The values of average variance extracted (AVE) were more than 0.50, and it established convergent validity. The HTMT ratio was used to determine the discriminant validity, and all the values were lower than 0.90, which means that the constructs are different. An inner model collinearity (VIF) of 1.613 and 1.000 were obtained in both directions GTD into EGB and PER into EGB and were far smaller than that of 3.3, indicating that there was no multicollinearity problem.

3.2 Structural Model Assessment

Bootstrapping with 5,000 resamples was used to test structural models. The model explained 53.7% of the variance in EGB ($R^2 = 0.537$) and 38.0% of the variance in PER ($R^2 = 0.380$), indicating moderate to substantial predictive power (Hair et al., 2019). All the three hypothesized direct paths were significant ($p < 0.001$). GTD had a significant direct effect on EGB ($\beta = 0.316$, $t = 4.752$, $p < 0.001$), supporting H1. GTD also significantly predicted PER ($\beta = 0.617$, $t = 10.755$, $p < 0.001$), supporting H2. PER in turn had a significant positive effect on EGB ($\beta = 0.494$, $t = 7.966$, $p < 0.001$), supporting H3. The effect of GTD on EGB via PER was also significant ($\beta = 0.305$, $t = 6.170$, $p = 0.001$) which proved the significance of PER in mediating the relation between GTD and EGB (H4). The effect sizes (f^2) indicated a large effect for GTD on PER ($f^2 = 0.613$), a medium-to-large effect for PER $\rightarrow$ EGB ($f^2 = 0.326$), and a small-to-medium effect for GTD $\rightarrow$ EGB ($f^2 = 0.134$). The fit of the model was satisfactory (SRMR = 0.076).

4. Conclusions, Implications, and Limitations

The results of this research point to the significance of organizational practices as well as perceptions of employees to advance green behavior. The findings validate the claim that employees tend to adopt environmentally friendly behavior when they believe that their organization is also environmentally responsible. Green training and development are very important in creating perception and behavior.

Theoretically, the proposed study fits into the current body of literature by incorporating employee perception and training in the elucidation of employee green behavior. In practical terms, the findings imply that banks ought to invest in systematic and ongoing green training to enable employees to gain environmental awareness and skills. Furthermore, banks need to have their environmental policies communicated clearly by policymakers and management, and environmental sustainability goals incorporated into organizational strategies, and staff involvement in green programs encouraged. The banks can also implement incentive schemes, recognition schemes and performance appraisal schemes which are tied to environmental behavior so as to motivate the employees. Moreover, a supportive organizational culture that would appreciate the importance of sustainability and leadership commitment can be used to reinforce the perceptions of the employees towards environmental responsibility and enhance employee green behavior.

The study is, however, constrained by its cross-sectional design and concentration on the banking sector, making the study limited in generalization. These limitations can be overcome in future studies through the utilization of a longitudinal design to more clearly understand causal relations over time. The study can also be extended by researchers to other industries and to compare findings across industries. Moreover, other variables like green leadership, organizational culture or environmental commitment can be included in future research as moderators or mediators to give an in-depth picture of green behavior among employees. Mixed methods of quantitative and qualitative data may also give more detailed information about employee perceptions and behaviors.

To conclude, the research shows that employee perception and green training are important elements in facilitating employee green behavior in the workplace that led to organizational sustainability and long run environmental performance.

References

- Aminullah, M. Z., & Ekowati, D. (2025). Individual Pro-Environmental Behaviour: A Study on Employees in Indonesia's Banking Industry. *Journal Research of Social Science, Economics, and Management*, 5(2), 3377–3392. <https://doi.org/10.59141/jrssem.v5i2.1055>
- AlDana, M., Abbas, A. E., Jneid, C., & Mosleh, S. (2026). Green Training and Development Influencing Employee Green Behavior: The Mediating Role of Employee Green Attitude and Intentions in Lebanese Small and Medium-sized Enterprises. *International Review of Management and Marketing*, 16(3), 646–661. <https://doi.org/10.32479/irmm.23316>
- Aslam, W., & Jawaid, S. T. (2022). Green banking adoption practices: improving environmental, financial, and operational performance. *International Journal of Ethics and Systems*. <https://doi.org/10.1108/ijoes-06-2022-0125>
- Badampudi, D., Fotrousi, F., Cartaxo, B., & Usman, M. (2022). Reporting Consent, Anonymity and Confidentiality Procedures Adopted in Empirical Studies Using Human Participants. *E-Informatica Software Engineering Journal*, 16. <https://www.e-informatyka.pl/index.php/einformatica/volumes/volume-2022/issue-1/article-9/>
- Bryman, A. (2003). *Research Methods and Organization Studies*. Routledge. <https://doi.org/10.4324/9780203359648>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31 (1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage.
- Hair, J. F., Babin, B. J., & Krey, N. (2017). Covariance-Based Structural Equation Modeling in the *Journal of Advertising: Review and Recommendations*. *Journal of Advertising*, 46(1), 163–177. <https://doi.org/10.1080/00913367.2017.1281777>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://link.springer.com/article/10.1007/s11747-014-0403-8>
- Liu, T.-L., Lin, T. T., & Hsu, S.-Y. (2023). Exploring the Perspective of Bank Employees on the Impact of Green Process Innovation and Perceived Environmental Responsibilities on the Sustainable Performance of the Banking Industry. *Sustainability*, 15(22), 15925. <https://doi.org/10.3390/su152215925>
- Malsha, K. P. P. H. G. N., Arulrajah, A. A., & Senthilnathan, S. (2020). Mediating role of employee green behaviour towards sustainability performance of banks. *Journal of Governance & Regulation*, 9(2), 92–102. <http://doi.org/10.22495/jgrv9i2art7>
- Marko Sarstedt, Richter, N. F., Hauff, S., & Ringle, C. M. (2024). Combined importance–performance map analysis (cIPMA) in partial least squares structural equation modeling (PLS–SEM): a SmartPLS 4 tutorial. *Journal of Marketing Analytics*. <https://doi.org/10.1057/s41270-024-00325-y>
- Murtaza, S. A., Mahmood, A., Saleem, S., Ahmad, N., Sharif, M. S., & Molnár, E. (2021). Proposing Stewardship Theory as an Alternate to Explain the Relationship between CSR and Employees' Pro-Environmental Behaviour. *Sustainability*, 13(15), 8558. <https://doi.org/10.3390/su13158558>
- Neruja Sivalingam, & A. Anton Arulrajah. (2022). The Impact of Organizational Environmental Support on Organizational Sustainable Performance: The Mediating Role of Employee Green Behaviour in selected Commercial banks in Batticaloa Region of Sri Lanka. *Vidyodaya Journal of Management*, 8(II). <https://doi.org/10.31357/vjm.v8iii.6093>
- Priyashantha, K. G., & Yogendran Priyangaa. (2022). Impact of Green Human Resource Management on Employee Green Behaviour: The Mediating Role of Green Attitude. *Indonesian Journal of Sustainability Accounting and Management*, 6(2). <https://doi.org/10.28992/ijSAM.v6i2.674>

- Renwick, D. W. S., Redman, T., & Maguire, S. (2013). Green Human Resource Management: A Review and Research Agenda. *International Journal of Management Reviews*, 15(1), 1–14. <https://doi.org/10.1111/j.1468-2370.2011.00328.x>
- Shaumya, K., & Arulrajah, A. A. (2016). Measuring Green Banking Practices: Evidence from Sri Lanka. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2909735>
- Smartpls. (2014). *Product | SmartPLS*. Smartpls.com. <https://www.smartpls.com/>
- Wickramarathna D.T.N, Halwatura D, Pallewatta P.K.T.N.S, Seneviratne B.Y.H, & Dharmarathne H.A.S.G. (2024). Comparative Analysis of Sustainable Banking in Public and Private Sector Banks in Sri Lanka. *Proceedings of International Forestry and Environment Symposium*, 27. <https://doi.org/10.31357/fesympo.v27.6665>

