Review Paper

Workplace Green Behavior in Sustainable Environment: A Comprehensive Review

Made Ermawan Yoga Antara[1], I Wayan Gede Supartha[2], I Made Artha Wibawa[3], Made Surya Putra[4]

[1]Doctoral Study Program in Management Science, [2,3,4]Department of Management, Faculty of Economics and Business, Universitas Udayana, Denpasar, Indonesia.

Corresponding Author: Made Ermawan Yoga Antara

ABSTRACT

This systematic literature review addresses the theme of corporate employees' green behavior with the aim of providing an overview of research related to the antecedents of green behavior in the workplace that leads to environmental sustainability in the hospitality industry. This study uses the PRISMA model and includes 200 articles from the Scopus and Web of Science databases with a publication period from 2010 to 2023, which were then selected based on several inclusion and exclusion criteria. There were eleven articles that qualified for the qualitative analysis process. The articles were analyzed using a content analysis approach. The results of the data analysis showed that the selected articles listed several factors as supporters of green behavior in the workplace. These factors are management commitment to the ecological environment, green work engagement, green human resource management practices, green recruitment & selection, green training & development, green performance management, green rewards & compensation, green empowerment & participation, perceived green organizational support, corporate social responsibility, transformational leadership, green intellectual capital, employee well-being, personal environmental norms, responsible leadership, and responsibility taking.

INTRODUCTION

Because of today's growing worries about the environment and resource consumption, as well as the introduction of stricter environmental legislation in many countries, more organisations are encouraging green behavior from their employees (Dumont et al., 2017). This is especially true for hotels, as they rely on energy, natural resources, and human capital to help achieve sustainable development goals through resource conservation and environmental protection (Kim et al., 2017; Ahmed et al., 2020). Two instances of conscientious or environmentally conscious actions that demonstrate a respect for environmental sustainability include cutting down on resource waste and recycling resources. These behaviors are referred to as green behavior. Thus, workplace green behavior includes projects and activities like recycling, reducing waste by making corrections electronically instead of printing documents, conserving energy by using teleconferences instead of driving to meetings, and saving money by turning off lights when leaving an office.

Presenting an overview of the research on the variables influencing environmentally

conscious workplace green behavior and supporting environmental sustainability in the hospitality industry is the aim of this systematic review of the literature. The results of this study have the potential to enhance our comprehension of the significant role that the employee-company connection plays in elucidating the influence of green behavior characteristics on the sustainability of the hospitality sector.

MATERIALS & METHODS

In order to determine the preconditions of workplace green behavior that result in environmental sustainability in the hotel sector, this study employs a methodical literature review approach. A comprehensive literature review develops theoretical and methodological answers to particular problems and appraises or critically appraises prior information, concepts, or findings. By incorporating empirical data from many perspectives, a literature review can offer solutions to research problems that other studies do not have (Snyder, 2019). A literature review is also an excellent way to summarize research findings and pinpoint areas that require greater study. These are essential phases in creating a conceptual model and a theoretical framework. A systematic literature review aims to assess the current status of the literature on a particular topic or Research Question (RQ). An organized approach to synthesizing research, a systematic literature review adheres to a set of predetermined protocols (Boland et al., 2017). A systematic literature review is considered the most acceptable and systematic strategy since it is conducted in a methodical manner and can maintain the strongest data validity. A comprehensive evaluation of the literature incorporates the findings of research in the area to facilitate the following: (1) developing new theories, evaluating preexisting beliefs, or demonstrating implications for practice or policy; (2) drawing firm and comprehensive conclusions by providing an objective summary of the body of evidence regarding a given subject; and (3) analyzing the literature in the topic critically to find connections, conflicts, methodological errors, gaps, and inconsistencies that help guide future research paths (Siddaway et al., 2019).

Search Process

In order to find publications for the literature review analysis technique, the PRISMA paradigm was used. The PRISMA approach comprises four parts: 1) doing a literature search; 2) breaking down material extracted from study reports into two distinct stages; 3) synthesising and combining evidence from individual studies; and 4) analysing the combined results of this analysis.

Criteria for Article Included and Removed

The English-language journals published between 2010 and 2023 that discuss the causes of workplace green behavior that contributes to environmental sustainability in the hospitality sector meet the inclusion requirements. Journals published before 2010 in languages other than English and conversations concerning the causes of workplace green behavior outside of the hotel sector were excluded from consideration.

Table 1. Criteria for Article Included and Excluded

No	Criteria for Article Included	Criteria for Article Removed
1	Articles released from 2010 until 2023	Articles released prior to 2010
2	Article uses antecedents of workplace green behavior	Article does not use antecedents of workplace green behavior
3	Article mentions workplace green behavior in the context of environmental sustainability in the hospitality industry	Article not discuss workplace green behavior other than the context of environmental sustainability in the hospitality industry

Source: Author's elaboration

Quality Assessment

The evaluation of pertinent indexed journals and papers is referred to as quality control. Web of Science (WoS) and Scopus databases contained research papers that were used as the study's data sources. At this point, the following questions were used to analyse the data:

QA1: Was the article released between 2010 and 2023?

QA2: Does the material cover the necessary conditions for an employee to engage in green behavior?

QA3: Is workplace green behavior discussed in the paper in relation to environmental sustainability in the hospitality sector?

And based on the previously indicated claim, each article was given a score, with a "Yes" or "No" indicated correspondingly.

Data Gathering

The databases Scopus and Web of Science were employed to locate scholarly articles released from 2010 to 2023, which served as the study's sources of data. The keywords used for the search include workplace green behavior, environmental sustainability, hospitality industry, green HRM.

Data Analysis

Content analysis was used in the data analysis process to provide answers to the study questions. Both quantitative and qualitative literature studies frequently use content analysis to generate descriptive data that may be contextually examined. The methical process of content analysis consists of the following steps: (a) coding, (b) grouping codes according to commonalities, and (c) data abstraction. The author and co-authors then verified the analysis's findings.

RESULT

The method of locating literature sources through the application of PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines is as follows.
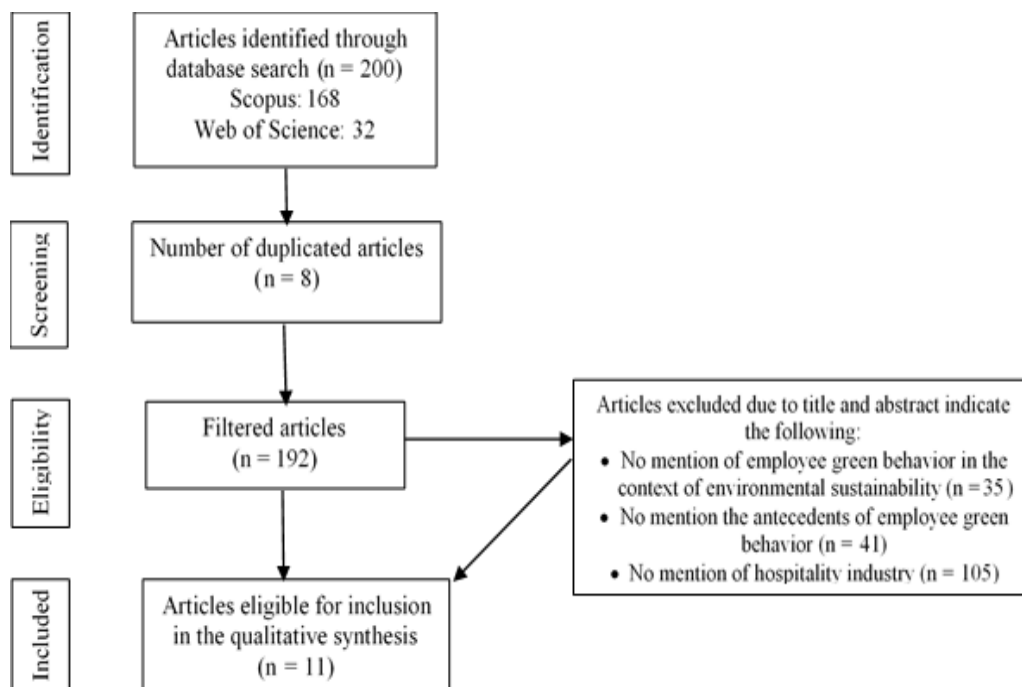

Figure 1. Systematic Literature Review Process PRISMA Flowchart

Results of the Quality Assessment and the Search Process

The first steps of the search process turned up 200 peer-reviewed journal papers that were indexed in the Scopus and Web of Science databases. After that, eight literatures that were found to be duplicates were eliminated from the results. Title, abstract, and

keywords were used to filter a total of 192 literary works. 181 publications were disqualified for compelling reasons, including the use of non-English language, failure to address the causes of environmentally conscious employee behavior, and lack of application to the hospitality sector. Eleven literatures were left, and they all went through The process of Quality Assessment.

Table 2. Articles Used in the Process of Analysis

No.	Reseacher	Year	Title	Source	Article Type	Type of Study	Respondent	Location of Study	Result of Study
1	Karatepe, T., Ozturen, A., Karatepe, O. M., Uner, M. M., & Kim, T. T.	2022	Management commitment to the ecological environment, green work engagement and their effects on hotel employees' green work outcomes.	International Journal of Contemporary Hospitality Management, 34(8), 3084-3112, ISSN 0959-6119, https://doi.org/10.1108/IJCHM-10-2021-1242	Journal	Quantitative	hotel customer-contact employees	Turkey & South Korea	Management commitment to the ecological environment (MCEE) positively influenced Green work engagement (GWEN), MCEE has a positive effect on pro-environmental behavior (PEB). GWEN positively influenced PEB were significant at $p < 0.01$.
2	Raza, S. A., & Khan, K. A.	2022	Impact of green human resource practices on hotel environmental performance: the moderating effect of environmental knowledge and individual green values.	International Journal of Contemporary Hospitality Management, 34(6), 2154-2175, ISSN 0959-6119, https://doi.org/10.1108/IJCHM-05-2021-0553	Journal	Quantitative	white-collar employees of guest service hotels	Pakistan	The results reveal that Green HRM practices positively correlate with employees' eco-friendly behavior.
3	Qio, A. O., Tan, C. N. L., & Alias, M.	2022	Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector.	Social Responsibility Journal, 18(1), 1-18, ISSN 1747-1117, https://doi.org/10.1108/SRJ-12-2019-0403	Journal	Quantitative	Employees	Malaysia	The results suggest that green training and development, performance management and empowerment and participation are essential in stimulating pro-environmental IT behavior.
4	Karatepe, O. M., Hsieh, H., & Aboramadan, M.	2022	The effects of green human resource management and perceived organizational support for the environment on green and non-green hotel employee outcomes.	International Journal of Hospitality Management, 103, ISSN 0278-4319, https://doi.org/10.1016/j.ijhm.2022.103202	Journal	Quantitative	Hotel employees	Taiwan	green human resource management enhances employees' perceptions of organizational support for the environment, while perceived organizational support for the environment fosters work engagement and task-related pro-environmental behavior and reduces quitting intentions.
5	Xu, L., Mohammad, S. J., Nawaz, N., Samad, S., Ahmad, N., & Comite, U.	2022	The Role of CSR for De-Carbonization of Hospitality Sector through Employees: A Leadership Perspective.	Sustainability (Switzerland), 14(9), ISSN 2071-1050, https://doi.org/10.3390/su14095365	Journal	Quantitative	Hotel employees	Pakistan	corporate social responsibility (CSR) relationships were statistically significant on pro-environmental behavior (PEB). green perceived organizational support (GPOS) relationships were statistically significant on PEB. environmental-specific transformational leadership (ESTFL) relationships were statistically significant on PEB.
6	Nisar, Q. A., Haider, S., Ali, F., Jamshed, S., Ryu, K., & Gill, S. S.	2021	Green human resource management practices and environmental performance in Malaysian green hotels: The role of green intellectual capital and pro-environmental behavior.	Journal of Cleaner Production, 311, ISSN 0959-6526, https://doi.org/10.1016/j.jclepro.2021.127504	Journal	Quantitative	employees of green hotels	Malaysia	Green intellectual capital is significantly related to employees' pro-environmental behaviors.
7	Ababneh, O. M. A.	2021	How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes.	Journal of Environmental Planning and Management, 64(7), 1204-1226, ISSN 0964-0568, https://doi.org/10.1080/09640568.2020.1814708	Journal	Quantitative	hotels employees	Jordan	Green HRM is positively associated with employee green behavior. employee engagement with environmental initiatives on employee green behavior were significant.
8	AlSuwaidi, M., Eid, R., & Agag, G.	2021	Understanding the link between CSR and employee green behaviour.	Journal of Hospitality and Tourism Management, 46, 50-61, ISSN 1447-6770, https://doi.org/10.1016/j.jhtm.2020.11.008	Journal	Quantitative	hotel employees	United Arab Emirate (UAE)	CSR positively influences employee green behavior. Personal environmental norms positively influences green behavior. Employee well-being positively influences green behaviour.
9	He, J., Morrison, A. M., & Zhang, H.	2021	Being sustainable: The three-way interactive effects of CSR, green human resource management, and responsible leadership on employee green behavior and task performance.	Corporate Social Responsibility and Environmental Management, 28(3), 1043-1054, ISSN 1535-3958, https://doi.org/10.1002/csr.2104	Journal	Quantitative	Millennial employees in five-star hotels	China	Green HRM, responsible leadership, and CSR had positive effects on green behavior.
10	Elshaer, I. A., Sobaih, A. E. E., Aliedan, M., & Azazz, A. M.	2021	The effect of green human resource management on environmental performance in small tourism enterprises: Mediating role of pro-environmental behaviors.	Sustainability (Switzerland), 13(4), 1-17, ISSN 2071-1050, https://doi.org/10.3390/su13041956	Journal	Quantitative	employees in small hotels	Egypt	Green HRM has a positive effect on employee pro-environmental behavior.
11	Wood, B. P., Eid, R., & Agag, G.	2021	A multilevel investigation of the link between ethical leadership behaviour and employees green behaviour in the hospitality industry.	International Journal of Hospitality Management, 97, ISSN 0278-4319, https://doi.org/10.1016/j.ijhm.2021.102993	Journal	Quantitative	Hotels employees	UAE	Employees well-being has a positive direct effect on green behaviour. Taking responsibility has a positive direct effect on green behaviour.

Source: Author's elaboration

The Quality Assessment findings are displayed in Table 3 below.

Table 3. Quality Assessment of Selected Articles

No.	Author-Title	QA1	QA2	QA3	QA Result
1	Karatepe, T., Ozturen, A., Karatepe, O. M., Uner, M. M., & Kim, T. T. Management commitment to the ecological environment, green work engagement and their effects on hotel employees' green work outcomes.	Yes	Yes	Yes	Accepted
2	Raza, S. A., & Khan, K. A. Impact of green human resource practices on hotel environmental performance: the moderating effect of environmental knowledge and individual green values.	Yes	Yes	Yes	Accepted
3	Ojo, A. O., Tan, C. N. L., & Alias, M. Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector.	Yes	Yes	Yes	Accepted
4	Karatepe, O. M., Hsieh, H., & Aboramadan, M. The effects of green human resource management and perceived organizational support for the environment on green and non-green hotel employee outcomes.	Yes	Yes	Yes	Accepted
5	Xu, L., Mohammad, S. J., Nawaz, N., Samad, S., Ahmad, N., & Comite, U. The role of CSR for de-carbonization of hospitality sector through employees: A leadership perspective.	Yes	Yes	Yes	Accepted
6	Nisar, Q. A., Haider, S., Ali, F., Jamshed, S., Ryu, K., & Gill, S. S. Green human resource management practices and environmental performance in Malaysian green hotels: The role of green intellectual capital and pro-environmental behavior.	Yes	Yes	Yes	Accepted
7	Ababneh, O. M. A. How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes.	Yes	Yes	Yes	Accepted
8	AlSuwaidi, M., Eid, R., & Agag, G. Understanding the link between CSR and employee green behaviour.	Yes	Yes	Yes	Accepted
9	He, J., Morrison, A. M., & Zhang, H. Being sustainable: The three-way interactive effects of CSR, green human resource management, and responsible leadership on employee green behavior and task performance.	Yes	Yes	Yes	Accepted
10	Elshaer, I. A., Sobaih, A. E. E., Aliedan, M., & Azazz, A. M. The effect of green human resource management on environmental performance in small tourism enterprises: Mediating role of pro-environmental behaviors.	Yes	Yes	Yes	Accepted
11	Wood, B. P., Eid, R., & Agag, G. A multilevel investigation of the link between ethical leadership behaviour and employees green behaviour in the hospitality industry.	Yes	Yes	Yes	Accepted

Source: Author's elaboration

DISCUSSION

A content analysis was done following the article eligibility selection phase. Defining and categorising every soft competency that is discussed in every article is the first step in the analytical process. The process of classifying codes based on commonalities comes next, followed by abstraction. The antecedents of workplace green behavior that are identified and categorised in each of the analysed articles are shown in the Table 4.

Table 4 illustrates that green human resource management practises (GHRM) are the most frequently indicated antecedent of workplace green behavior in the analysed articles. The management commitment to the ecological

environment, transformational leadership, green intellectual capital, individual environmental norms, responsible leadership, and accepting responsibility are the least discussed antecedents of workplace green behavior. Since environmental sustainability is essential to an industry's performance and longevity, green HRM practises, green work engagement, and corporate social responsibility are required to boost workplace green behavior that leads to sustainability in the hospitality sector.

Table 4. Identified Antecedents of Workplace Green Behavior of the Articles

No	Variable	Dimension	Article Number
1	management commitment to the ecological environment		1
2	green work engagement		1, 4, 7
3	green human resource management practices (GHRM)	green recruitment & selection, green training & development, green performance management, green reward & compensation, green empowerment & participation	2, 3, 7, 9, 10
4	green perceived organizational support		4, 5
5	corporate social responsibility (CSR)		5, 8, 9
6	transformational leadership		5
7	green intellectual capital		6
8	employee well-being		8, 11
9	personal environmental norms		8
10	responsible leadership		9
11	taking responsibility		11

Source: Author's elaboration

CONCLUSION

To achieve environmental sustainability, there are a number of green behavior requirements for employees. Green work engagement, green HRM practises, green recruitment & selection, green training & development, green performance management, green reward & compensation, green empowerment & participation, and the outcomes of the systematic literature review, green perceived organisational support, corporate social responsibility, transformational leadership, green intellectual capital, employee well-being, personal environmental norms, responsible leadership, and taking responsibility are some of the aspects of workplace green behavior that are relevant to the needs of environmental sustainability in the hospitality industry. One of the research's limitations is its inability to include all published works pertaining to environmentally conscious employee behavior. Grey literature, or works not published by academic or commercial publishers, was not included in the studies that were included since they were restricted to specific databases (Scopus and Web of Science). As a result, fewer manuscripts were examined in-depth. Furthermore, since only English-language publications were included in this form of systematic literature review, language barriers are a significant issue. In order to make sure that these details are in line with the circumstances in the field, it is advised that additional research be done to validate the findings from alternative techniques, as focus groups or in-depth interviews with experts. Furthermore, additional investigation may be carried out into the precursors of environmentally conscious employee behavior that is mandated by sectors other than hospitality.

Conflict of Interest: The authors declare no conflict of interest.

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