The effect of green human resource management on environmental performance: Systematic literature review

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ABSTRACT
Rapid industrialization has caused environmental degradation in recent years. Industrial activities produce global warming, climate change, drought, forest fires, ecological degradation, and environmental damage. Many companies think their business has no environmental impact, yet it does. The organization finally resolved to limit environmental pollution and save resources after seeing the phenomenon. Modern organizations no longer prioritize profitability and business benefits. Companies today prioritize ecologically friendly practices. This Systematic Literature Review collects some of the literature that discusses the influence of GHRM on EP. The research objective is to explore the literature related to the effect of GHRM on EP. This research was compiled using Preferred Reporting Items for Systematic Review and Meta-Analysis. The data collection method uses data inclusion. Some of the literature obtained was 75 literature taken from three sources, namely The Directory of Open Access Journals (DOAJ), Google Scholar, and Scopus with the help of Publish or Perish software. Then a screening was carried out and as many as 30 pieces of literature were obtained. The results show that of the 30 pieces of literature, 27 kinds of literature provide GHRM results with a positive and significant effect on EP. 1 literature shows that GHRM has no significant effect on EP, 1 literature makes GHRM a moderating variable and 1 literature makes GHRM a mediating variable.

KEYWORDS
Systematic Literature Review; PRISMA; Green Human Resource Management; Environment Performance

Introduction
In recent years, the level of environmental pollution has increased due to rapid industrialization (Jehan et al., 2020). Many industrial activities cause global warming which causes climate change, drought, forest fires, ecological damage, and environmental damage (Shah et al., 2021). Many organizations think that the business they manage does not have a bad impact on the environment, but in reality, this is not the case (Malik et al., 2020). Seeing the phenomenon that was happening, the organization finally decided to find a solution to reduce environmental pollution and save existing resources (Gill et al., 2021). For organizations living in today’s modern era, collecting profits and seeking business benefits are no longer their main priority (Adubor et al., 2022). One of the things that are of great concern to companies today is the application of environmentally friendly practices (Lee, 2019). For organizations, the role of human resources within the organization can play an important role in realizing environmentally friendly practices (Adubor et al., 2022; Martins et al., 2021). Several organizations have changed their conventional human resource management practices to green HRM practices by focusing on developing organizational human resources (Xiao et al., 2022).

In modern times, the HR department is responsible for training employees to protect the environment (Khan et al., 2022). Human resource management in an organization must realize how important green practices are in building organizations that have good environmental performance (Khalid et al., 2021). The involvement of HRM management will be very important in the success of organizations in improving organizational environmental performance through the implementation of green practices (Gill et al., 2021; Taiwo Hassan Ajadi et al., 2022). The influence of globalization on business can put pressure on the HR department to apply green organizational culture and behavior to employees known as Green Human Resource Management (GHRM). The purpose of this literature study is to answer the question “how does green HRM affect organizational environmental performance?”. In answering this question, the researcher raises a comprehensive Systematic Literature Review (SLR) study that adopts the Systematic Review and Meta-Analyses (PRISMA) method in identifying the suitability of data and helping to decipher theories from previous research.

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Methods

The design of this research article is a literature review. A literature review or literature review is library research sourced from books, journal articles, and other publications that have the same topic as the research topic raised by the author. The references used as data sources in this study are previous journal articles with relevant research themes. This research used 3 software, namely The Directory of Open Access Journals (DOAJ), Scopus, and Google Scholar which were accessed through https://doaj.org/, Scopus through Harzing’s Publish or Perish software, and https://scholar.google.com/ in searching the literature as a source of data. The researcher entered the keywords "the impact of green HRM on environment performance" OR "the effect of green HRM on environment performance" OR "the influence of green HRM on environment performance" OR "the impact of green HRM on environment performance" in the database.

Data selection

Identification

In the first identification stage, the researcher conducted a data search in the form of research articles in 3 databases, namely The Directory of Open Access Journals (DOAJ), Scopus, and Google Scholar. The keywords used in searching for data in the database are "the impact of green HRM on environment performance" OR "the effect of green HRM on environment performance" OR "the influence of green HRM on environment performance" OR "the impact of green HRM on environmental performance". At the identification stage, researchers managed to find data with the total number of articles. 27 articles in The Directory of Open Access Journals (DOAJ) database, 32 articles in the Scopus database, and 20 articles in the Google Scholar database.

Screening

The second stage in the PRISMA method is data filtering. Screening in this study was carried out by establishing inclusion and exclusion criteria. The inclusion criteria in this study include; (1) international journals with relevant topics; (2) English; (3) open-access articles; (4) published from 2018 to 2023. The exclusion criteria in this study were duplicate articles. In the data filtering stage, the remaining 54 data and 25 articles were discarded.

Eligibility

The final stage is eligibility. After carrying out the data filtering process, the articles will be observed manually by the researcher. The feasibility stage must ensure that all selected articles meet the researcher’s criteria. The eligibility criteria in this study are the suitability of the title and abstract of the article on the topic taken by the researcher. This feasibility stage produces 30 articles and discards 24 articles.

Included

After passing through the screening and feasibility stages, the rest of the articles will be taken to be used as references for research. There are 30 articles used as research material from reputable international journals.

Results

After the data collection process was completed, the researcher then conducted a review of the literature which became the data in this study which had gone through a screening process from the researcher using the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) method and data inclusion. From these processes, the explanation related to the results will be classified as follows:

General characteristics

These general characteristics include a summary and core discussion of the literature which is the criterion in this study. This refers to the criteria determined from the PRISMA method which is the provision in this systematic literature review.

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Research Type
The data collection like this was carried out by researchers to carry out a literature review analysis and obtained as many as 30 international literatures by filtering according to data inclusion provisions. Of the 30 pieces of literature, there is 1 piece of literature published in 2018, 5 pieces of literature or 17% published in 2019 and 2020. And the most dominant is 10 literature or 33% published in 2021, then the last one in 2022 published as much as 9 literature, or 30%. Of the 30 kinds of literature with categories of origin, all come from international sources. This review process was carried out on the literature which became the data in this study, amounting to 30 kinds of literature. There is around 5 literature that uses more than one independent variable, such as green recruitment, green training, CEO ethical leadership, and environmental ethics. Based on the results of the 30 kinds of literature, the researchers categorized them into 4 types, namely green hrm has a significant positive effect on environmental performance, mediation, and moderation/intervening.

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Green human resource management (GHRM) has a significant positive effect on environmental performance

The literature that has been analyzed shows that green human resource management can affect the dependent variable of each study. From the literature that became the data for this research, 27 kinds of literature were obtained which showed that green human resource management or indicators of green HRM (green training, green, green recruitment) had a positive and significant effect on environmental performance from each literature. Some literature that makes green human resource management a variable mentions explicitly the indicators used, such as in research (Pervaiz et al., 2022), (Ahakwa et al., 2021), (Saleem & Mubashir, 2020), (Ren et al. al., 2021), (Jehan et al., 2020), (Kuo et al., 2022), (Amjad et al., 2021), (Rawashdeh, 2018), (Hadjiri et al., 2019), (Marruccu et al., 2021), (Munawar et al., 2022) which lists six items or one of them from the GHRM scale, namely training, rewards and compensation, performance appraisal, recruitment, and selection processes. Coupled with green performance management and assessment and green employee empowerment in research (Alam & Niu, 2021), (Karmoker et al., 2021), as well as indicators of increasing green motivation, environmentally friendly employee engagement practices, and increasing employee competence in research (Adeel et al., 2022). Apart from that, other studies did not specifically mention how the indicators of GHRM were used as independent variables in their research. This has no impact on the results obtained, meaning that producing GHRM has a positive and significant effect on Environmental Performance (EP), such as research from (Kim et al., 2019), (Liu et al., 2021). And 2 kinds of literature use variables from one of the GHRM indicators (green recruitment and green training), which are found in research (Mayangsari & Nawangsari, 2019) and (Sinaga & Nawangsari, 2019).

GHRM has no significant positive effect on environment performance

Some of the literature that examines EP is influenced by GHRM as an independent variable, after the results of the review, there is 1 literature that gives different results, namely, EP is not affected by GHRM. This research was carried out by (Elshaer et al., 2021) which gave different results from the majority of the literature which became data for a total of 30 kinds of literature, namely GHRM had no significant effect on EP.

Moderating or mediating variable

Unlike the case with the independent variable which is often Green Human Resource Management (GHRM) used as the variable, GHRM can also be a moderating variable. It is proven in one of the 30 kinds of literature that there is 1 piece of literature that makes GHRM a moderating variable, namely in research (Majid, 2022). GHRM is a moderating variable that contributes to influencing the independent and dependent variables in this study. Furthermore, apart from being a moderating variable, there is also literature that makes GHRM a mediating variable. This is in research from (Haldorai et al., 2022).

Discussion

Green Human Resource Management (GHRM) has several indicators that become a stimulus to be able to influence the dependent variable, namely Environmental Performance (EP). Each study certainly has its provisions regarding the use of indicators for GHRM. Because the indicators used in each study are sometimes different or sometimes have similarities. Several indicators are generally used as indicators of work discipline, such as training, reward and compensation, performance appraisal, recruitment, and selection processes, there is also literature that adds other indicators such as green performance management and assessment and green employee empowerment. The filtered literature then became data in this study totaling 30 works of literature, of this amount, 28 kinds of the literature showed GHRM affected EP in each study. Furthermore, there is only 1 literature showing that GHRM has no significant effect on EP, namely in research (Elshaer et al., 2021) which says that surprisingly the results obtained by GHRM do not affect Environmental Performance (EP). Then there is also 1 study (Majid, 2022) choosing to use GHRM as moderation compared to making it an independent variable like other literature.
Green human resource management has a positive and significant effect on environmental performance

In each study with the type of research article research produced, of course, there are various types, one of which has a significant positive effect or no significant effect. The meaning of positive influence means that the value of the independent variable is in the same direction as the dependent variable, or the rise and fall of the independent variable (GHRM) will also cause fluctuations in the dependent variable (EP). Meanwhile, the meaning of significant influence is that it has an important effect on the dependent variable. As for this study, after going through the screening process of data inclusion, 30 pieces of literature became data. It is known that as many as 28 pieces of literature show that GHRM affects EP in each of these studies. Of these, it is dominated by literature that uses a single variable, meaning that 28 of these pieces of literature use one variable, namely Green Human Resource Management.

With the domination of GHRM influencing this EP, it proves that GHRM has an urgency for companies as well as individual employees. With GHRM affecting EP, it will have a good impact on the environment, not just be profit-oriented. Employees’ belief in GHRM practices through green training will develop skills and have opportunities to work in an environmentally friendly manner, whose benefits will increase psychological availability and employee job satisfaction (Mohammad Ashraful et al., 2021). Apart from the focus on the effect of GHRM, research (Sobah et al., 2020) says that the effect produced by GHRM and indicators (ability, motivation, and opportunities) on EP is not the same. The power of influence of green abilities dominates more than others, this result shows the urgency of management ability in recruiting, selecting, and placing the right people who have environmental values and arrange environmental training. In line with that (management's ability to make policies on recruitment, staffing, training, and compensation that are environmentally friendly) will also contribute to the development of environmentally friendly workforce behavior, which will have an impact on environmental performance, (Gill et al., 2021) and agreed with what was conveyed by Raic, (2021) in his research. In general, the percentage of GHRM influence on environmental performance is not specifically stated, only mentioning that GHRM has a positive and significant effect on EP as in research (Abuelhassan, 2020), (Ahmed et al., 2019), (Anwar et al., 2020), (Mustafa et al., 2022), and (Sakharina et al., 2020).

GHRM has no significant effect on environmental performance

GHRM besides being able to influence EP as in the 28 literature, can also have different results, namely, it does not have a significant effect on EP. 1 literature that produces this difference, namely in research (Elshaer et al., 2021) in the abstract stated that it was quite surprising that EP was not significantly affected by GHRM. This result occurs in the small tourism business sector, where the majority of employees in the sector are part-time employees. The literature says that different treatment between part-time employees or contract workers and permanent employees must be carried out to achieve performance that is aligned with goals because part-time employees are not a homogeneous group.

Moderating or mediating variable

Apart from being used as an independent variable, GHRM is sometimes also used as a moderating variable in a study. In the literature that has been reviewed, totaling 30 kinds of literature, it is known that there is only one piece of literature that makes Green Human Resource Management a moderating variable, namely research (Majid, 2022). The literature abstract states that environmental ethics and environmental performance can be connected through the moderation of GHRM. Apart from that, research (Majid, 2022) provides a suggestion due to increasingly competitive competition, to adopt GHRM practices, thereby making it easier to win the competition and improve environmental performance in companies. As for GHRM, it can also mediate between variables in research (Haldorai et al., 2022), the literature states that top management’s environmentally friendly commitment and green intellectual capital have a direct influence on EP and GHRM.

Conclusion

After going through an explanation of the background, methods, and results as well as a discussion. So the next step is closing or concluding. This research collects literature as data for review. The literature screening process was carried out by the categorization that had been established in this study, and 30 pieces of literature were obtained. The discussion raised is about the influence of green human resource management (GHRM) on environmental performance (EP). GHRM and EP are used as variables for testing, and the form of variables for GHRM and EP can be in the form of independent, moderating, or mediating variables and even dependent variables. However, in the 30 literature reviews that have been carried out, researchers have not found GHRM to be used as the dependent variable, only used as an independent variable and moderation/mediation. As for EP, there is 1 literature that makes EP an independent variable. Apart from that, the majority of the 30 pieces of literature, as many as 27 pieces of the literature yielded results that stated GHRM had a positive and significant effect on EP in each of these pieces of literature. 1 literature produces GHRM which has no significant effect on EP, 1 literature discusses GHRM being moderate, and 1 literature GHRM is mediating. This can be used as a reference and consideration for policymakers (companies) to pay attention to GHRM and EP. This is because GHRM and EP are important matters based on the 30 pieces of literature that were reviewed, showing that more than half of these said GHRM had a positive and significant influence on EP.

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