

THE INFLUENCE OF GREEN HUMAN RESOURCE MANAGEMENT (GHRM) ON EMPLOYEE COMMITMENT: THE ROLE OF INNOVATION CAPABILITIES AND CULTURE OF INNOVATION

A INFLUÊNCIA DA GESTÃO DE RECURSOS HUMANOS VERDE (GRH) NO COMPROMISSO DOS FUNCIONÁRIOS: O PAPEL DAS CAPACIDADES DE INOVAÇÃO E DA CULTURA DE INOVAÇÃO

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Abstract

The study focuses on identifying Green Human Resource Management (GHRM) in influencing employee commitment with innovation capability as mediation and culture of innovation as moderation. The study aims to test and analyze the direct and mediation-moderation influence of GHRM on employee commitment and testing innovation capability as a mediator and culture of innovation as a moderator. This research contributes to organizations so that they can pay attention to the role of GHRM in increasing innovation capabilities and employee commitment and as actual literature on human resource management science. This research adopted a quantitative approach, utilizing questionnaires for data collection. These instruments were distributed to a sample of 250 employees within the plantation industry. The collected data were analyzed using Structural Equation Modeling (SEM) and Path Analysis. The results show that GHRM, consisting of green recruitment and selection, green training, and green involvement, has a direct and significant positive effect on innovation capability. Innovation capability has a significant positive effect on employee commitment.

Resumo

O estudo se concentra em identificar a Gestão Verde de Recursos Humanos (GRH) na influência do comprometimento dos funcionários, com a capacidade de inovação como mediação e a cultura de inovação como moderação. O objetivo do estudo é testar e analisar a influência direta e de mediação-moderação da GRH no comprometimento dos funcionários e testar a capacidade de inovação como mediadora e a cultura de inovação como moderadora. Esta pesquisa contribui para que as organizações possam se atentar ao papel da GRH no aumento da capacidade de inovação e do comprometimento dos funcionários, bem como à literatura atual sobre a ciência da gestão de recursos humanos. Esta pesquisa adotou uma abordagem quantitativa, utilizando questionários para coleta de dados. Esses instrumentos foram distribuídos a uma amostra de 250 funcionários do setor de plantações. Os dados coletados foram analisados por meio de Modelagem de Equações Estruturais (MEE) e Análise de Trilhas. Os resultados mostram que a GRH, que consiste em recrutamento e seleção sustentáveis, treinamento sustentável e envolvimento sustentável, tem um efeito positivo



Meanwhile, innovation capability acts as a mediator in the relationship between GHRM and employee commitment, and culture of innovation has been shown to moderate the relationship between innovation capability and employee commitment. This implies that the company management needs to holistically instill sustainability principles in every HR function. Organizations are also advised to strengthen a culture of innovation by creating open discussion spaces, incentivizing green innovation, and adopting a leadership style that encourages learning and experimentation. This study contributes to the literature by integrating GHRM on employee commitment through innovation capability into a mediation model moderated by culture of innovation, offering theoretical insights and practical recommendations to enhance employee commitment in the plantation industry.

Keywords: GHRM. Employee Commitment. Innovation Capability. Culture of Innovation.

direto e significativo na capacidade de inovação. A capacidade de inovação tem um efeito positivo significativo no comprometimento dos funcionários. Enquanto isso, a capacidade de inovação atua como mediadora na relação entre GHRM e o comprometimento dos funcionários, e a cultura de inovação demonstrou moderar a relação entre capacidade de inovação e comprometimento dos funcionários. Isso implica que a gestão da empresa precisa incutir holisticamente os princípios de sustentabilidade em todas as funções de RH. As organizações também são aconselhadas a fortalecer uma cultura de inovação, criando espaços abertos de discussão, incentivando a inovação verde e adotando um estilo de liderança que incentive o aprendizado e a experimentação. Este estudo contribui para a literatura ao integrar GHRM sobre o comprometimento dos funcionários por meio da capacidade de inovação em um modelo de mediação moderado pela cultura de inovação, oferecendo insights teóricos e recomendações práticas para aprimorar o comprometimento dos funcionários no setor de plantações.

Palavras-chave: GHRM. Comprometimento dos Funcionários. Capacidade de Inovação. Cultura de Inovação.

1 INTRODUCTION

As global awareness of the importance of environmental sustainability grows, various international standards and regulations have been introduced to encourage companies to adopt more environmentally friendly business practices (Ahmad, 2015; Jackson et al., 2011; Freeman, 1984). In Indonesia, environmental policies are increasingly being strengthened by government regulations and initiatives from various sustainability-focused non-governmental organizations (NGOs) (Siregar, 2019; Zaid et al., 2018; Teixeira et al., 2012). In this context, Green Human Resource Management (GHRM) has become one emerging approach to ensuring that environmental sustainability strategies can be effectively integrated into human resource (HRM) management (Jabbour & Santos, 2008; Renwick et al., 2013).

In its implementation, GHRM encompasses various aspects, such as green recruitment, employee training and development that focuses on environmentally friendly practices, performance evaluations that include environmental aspects, and reward

systems that encourage environmentally friendly behavior in the workplace (Renwick et al., 2013; Daily et al., 2009). Through GHRM, companies can build a work culture that supports sustainability initiatives, while improving the company's overall environmental performance (Daily & Huang, 2001; Dumont et al., 2017; Jabbour & de Sousa Jabbour, 2016).

Green Human Resource Management plays a crucial role for various employees, from recruitment/orientation to resignation. Currently, building high employee satisfaction is not only achieved through non-physical and social measures but also through environmental initiatives. Green policies and practices are believed to increase employee participation, engagement, and productivity (Dumont et al., 2017; Jabbour, 2011). GHRM can act as a motivator for employees to feel more involved and committed to the company. Employee commitment, often measured in terms of loyalty, involvement, and desire to remain in the organization, is a crucial factor in company success (Renwick et al., 2013; Meyer & Allen, 1991).

This study attempts to empirically test the effect of GHRM on employee commitment with innovation capability as a mediating variable and culture of innovation as a moderating variable. Studies on green recruitment and selection show that this practice increases affective commitment by attracting employees who share the same sustainability values as the organization (Arulrajah et al., 2015; Sharma & Gupta, 2015). Research by Jabbour et al. (2013) confirms that companies implementing green recruitment policies attract talent with high ecological awareness, thereby increasing the emotional bond between employees and the company. A similar view is expressed by Sharma and Gupta (2015), who found that green recruitment has a positive influence on employee commitment due to the congruence of values between employees and the organization (Jabbour & Santos, 2008; Paille et al., 2014; Arulrajah et al., 2015).

Green training not only improves employees' skills in environmental management but also fosters normative commitment, a commitment based on a sense of moral obligation (Paille et al., 2014; Dumont et al., 2017). A study by Tang et al., (2018) found that eco-friendly training fosters employee awareness of their role in maintaining sustainability, leading them to feel more morally responsible towards the organization. This is also supported by research by Ahmad (2015), which shows that companies that provide environmental training successfully increase normative commitment because

employees see moral value in their contributions to the company's sustainability (Jackson et al., 2011; Renwick et al., 2013).

Based on the literature review, a research gap persists regarding the specific mechanisms through which Green Human Resource Management (GHRM) builds various types of employee commitment via innovation capability. Furthermore, the role of moderating variables such as organizational culture has not been thoroughly studied. Further research is needed to explore the psychological mechanisms that strengthen the relationship between GHRM and employee commitment, considering innovation capability as a mediating variable and culture of innovation as a moderating variable.

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Green recruitment and selection and innovation capabilities

Green recruitment and selection involves hiring employees who are environmentally conscious and whose values align with the company's sustainability vision. Recruiting talents who are environmentally conscious and have a background that supports sustainability can increase innovation capabilities, as these employees tend to be more creative in finding innovative, environmentally friendly solutions. Research by Yusliza et al. (2017) shows that green recruitment and selection contribute to increased innovation because recruited employees tend to have the ability to think creatively and innovate in facing sustainability challenges. Several studies have examined the relationship between green recruitment and selection and innovation capability in organizations. Based on these findings, there is a consensus that green recruitment and selection practices play a significant role in driving innovation within organizations. Therefore, the first hypothesis of this study is as follows:

H1: Green recruitment and selection has a positive and significant influence on innovation capability.

2.2 Green training and innovation capabilities

Green training provides employees with skills and knowledge related to environmentally friendly practices, which in turn can increase their innovation capacity.

Through this training, employees are equipped with new techniques and strategies focused on sustainability and resource efficiency, which can be a catalyst for innovation. Research by Jabbour et al. (2010) shows that environmental training improves employees' skills to innovate in the area of sustainability, creating new, greener and more efficient solutions for the organization. Various studies have explored the relationship between green training and innovation capabilities in organizations, with findings indicating that training oriented towards environmental sustainability can foster employees' innovative capabilities. One study by Jabbour (2015) showed that green training helps employees develop skills and knowledge relevant to environmentally friendly innovation, thereby increasing their ability to innovate on the job. Therefore, the second hypothesis of this study is as follows:

H2: Green training has a positive and significant influence on employee commitment

2.3 Green involvement and employee commitment

Green involvement refers to the active participation of employees in environmental initiatives and sustainability-related decision-making within an organization. When employees are given the opportunity to be involved in the decision-making process regarding environmentally friendly policies, they tend to feel more valued and feel like an integral part of the company's goals. In addition, green involvement also facilitates normative commitment, where employees feel morally responsible for the company's sustainability goals (Ramus & Steger, 2000). Research by Dumont et al. (2017) also shows that green involvement strengthens employee loyalty, which ultimately increases their long-term commitment to the organization. Employees who feel involved in sustainability-related decisions are more likely to remain with the company and support green initiatives, which strengthen their ongoing commitment to the company (Teixeira et al., 2012). Thus, green involvement has a significant positive relationship with employee commitment, as it increases their attachment to the organization's sustainable goals. Therefore, the third hypothesis of this study is as follows:

H3: Green involvement has a positive and significant influence on employee commitment.

2.4 Innovation capabilities and employee commitment

Maldonado-Guzmán et al. (2019) concluded that innovation capability is the most important organizational capability because it enables organizations to respond to fluctuations in the work environment effectively and efficiently. Innovation capability is the basis for companies to adapt to changes in the external environment, as well as to create and maintain competitive advantages (Osiyevskyy et al., 2025; Jabbour et al., 2010). Innovation is not just about developing new products or services, but also involves creating more efficient and sustainable solutions in an organization's operations. For example, Jabbour et al. (2010) argue that Innovation capabilities enable organizations to increase employee satisfaction and commitment because employees feel more involved in the processes that support the company's growth. Shen et al. (2016) showed that innovative organizations create greater value for employees, which in turn increases their commitment to the company. Thus, innovation capabilities play a crucial role in strengthening a company's competitiveness while increasing employee engagement and loyalty. Therefore, the fourth hypothesis of this study is as follows:

H4: Innovation capability has a positive and significant influence on employee commitment.

2.5 Green recruitment and selection, employee commitment, and innovation capabilities as a mediator

Renwick et al. (2013) explain that Green Recruitment and Selection is a strategic tool in creating a positive initial relationship between candidates and companies, which can impact their level of loyalty. Sharma and Gupta (2020) identified that the integration of sustainability-based selection criteria, such as evaluating the alignment of candidates' green values with the company, strengthens employees' sense of moral responsibility towards the company. In addition, innovation capability plays a significant role in mediating the relationship between Green Recruitment and Selection and employee commitment, as it enables companies to create more creative and sustainable solutions, which in turn increases employee engagement. Jabbour et al., (2010) argue that innovation capabilities enable organizations to more efficiently and creatively integrate green policies into the organizational structure, thereby increasing employee satisfaction

and commitment. Thus, Green Recruitment and Selection practices, when supported by innovation capabilities, can strengthen the relationship between companies and employees, driving not only sustainable performance but also higher employee engagement. Therefore, the fifth hypothesis can be proposed as follows:

H5: Innovation capabilities mediates the relationship between green recruitment and Selection and employee commitment.

2.6 Green training and employee commitment with innovation capability as a mediator

Green training provides the technical skills needed to comply with environmental policies, but also builds employee commitment to the company's sustainability goals (Renwick, Redman, & Maguire, 2013; Jabbour, 2015; Dumont et al., 2017). In addition to providing technical knowledge, environmental training serves as a tool to inspire employees, connect them to the company's long-term goals, and increase their intrinsic motivation. This training not only provides benefits to the company, but also increases the intrinsic motivation of employees by giving meaning and value to their work (Ryan & Deci, 2000). Thus, green training not only improves employees' technical competence but also fosters pro-environmental attitudes that can lead to improved organizational performance. Therefore, the sixth hypothesis that can be proposed is as follows:

H6: Innovation capability mediates the relationship between green training and employee commitment.

2.7 Green involvement and employee commitment with innovation capability as a mediator

Green involvement can strengthen employee commitment, affectively, normatively, and sustainably, because employees feel directly involved in decisions that contribute to the company's environmental sustainability (Renwick, Redman, & Maguire, 2013; Jabbour & Santos, 2008; Dumont et al., 2017). Daily et al., (2009) stated that green involvement that invites employees to participate in environmental decision-making encourages greater emotional involvement and strengthens employee commitment. Employees who feel their voices are heard and contribute to environmental decisions tend

to exhibit higher levels of organizational engagement. According to Ramus & Steger (2000), employee involvement in environmental decision-making can increase their sense of responsibility toward the environment and the organization, thereby strengthening normative commitment. Employees who feel a moral responsibility to the organization are more motivated to stay and contribute. Furthermore, Teixeira et al. (2012) highlighted that employee participation in green innovation strengthens their on-going commitment to the company, as they see the positive impact of their actions on the company's long-term sustainability. Based on this explanation, the seventh hypothesis can be proposed as follows:

H7: Innovation capability mediates the relationship between green involvement and employee commitment

2.8 Innovation capability on employee commitment with culture of innovation as moderation

A strong culture of innovation increases employee engagement and loyalty to the organization, because they feel they are part of a company that values innovation and development. Martins and Terblanche (2003) emphasize the importance of a culture of innovation in creating an environment that supports employees' innovative abilities. This aligns with the findings of Mumford and Gustafson (1988), who suggested that companies with a strong culture of innovation tend to be more successful in leveraging their innovation capabilities to enhance employee commitment. In addition, research by Jansen et al., (2006) also shows that a culture of innovation that encourages continuous learning and creative development helps increase employee motivation, which in turn strengthens their relationship with the company. Thus, companies that build a strong culture of innovation not only increase their competitiveness in the market but also create stronger bonds between employees and the organization. Based on this explanation, the eighth hypothesis can be proposed as follows:

H8: Culture of innovation Moderates the Relationship between Innovation Capability and Employee Commitment

3 METHODOLOGY

3.1 Population and sample

This study is an explanatory research that aims to explain the relationships among the variables: Green Human Resource Management (GHRM), innovation capabilities, culture of innovation, and employee commitment. The study's population consists of all employees working at PTPN IV North Sumatra Region, from which a sample of 250 employees was selected for the research. The sampling method employed was purposive sampling, using the following criteria: employees must hold permanent or non-permanent status at PTPN IV North Sumatra Region, have a minimum of three years of work experience, and agree to participate as research respondents.

3.2 Research instruments

Data were collected using a survey method involving the distribution of questionnaires. Researchers directly provided survey participants with the list of questions and instructed them to complete the survey. The survey questions were structured using a five-point scale, which refers to the Likert scale model, to obtain interval data. This five-point model is designed to test how often survey participants do something or never do something, with response options such as "Strongly Agree", "Agree", "Neither Agree", "Disagree", and "Strongly Disagree". The following is a table containing alternative respondent answers contained in the Likert Scale model. The variables of this research are GHRM as an independent variable, innovation capability as a mediating variable, culture of innovation as a moderating variable, and employee commitment as a dependent variable. Green Human Resource Management (GHRM) was measured using three dimensions: Green Recruitment and Selection (15 items; Pham & Paille, 2019), Green Training (7 items; Tang et al., 2018), and Green Involvement (5 items; Rendwick, Redman, & Maguire, 2013). The remaining constructs—Employee Commitment (Meyer & Allen, 1991), Innovation Capability (Kasim & Noh, 2012), and Culture of innovation (Dobni, 2008)—were measured using 10, 4, and 4 items, respectively.

3.3 Data analysis

The data analysis technique in this study used Partial Least Square (PLS). Structural Equation Modeling-Partial Least Square (SEM-PLS) is one of the classifications of the Structural Equation Modeling (SEM) method.

4 RESULTS

4.1 Validity and reliability test

Validity in this study was measured through two main aspects: convergent validity and discriminant validity. Convergent validity was measured using Outer Loading and Average Variance Extracted (AVE). According to Chin (1998) and Kline (2015), a construct is considered convergently valid if the indicators used to measure it demonstrate a high correlation and are relevant to the underlying theory. In this test, each item with an outer loading of more than 0.5 is considered to have good indicator validity, because the higher the loading value, the stronger the relationship between the indicator and the construct being measured. Based on the results, all items have outer loading values above 0.5, and most are above 0.7, indicating that these indicators are very valid in representing their respective variables.

In addition, Average Variance Extracted (AVE) is also used to assess convergent validity. As explained by Chin (1998), an AVE value greater than 0.5 is considered adequate, indicating that the indicators sufficiently explain the variance of the construct. The table shows that all AVE values for the tested constructs are greater than 0.5, with the highest value being Culture of Innovation (0.762). This confirms that all constructs in this study are convergently valid.

Cronbach's Alpha is used to measure the internal consistency of the constructs being tested. A Cronbach's Alpha value greater than 0.7 is considered to indicate good reliability, meaning that the instrument used is consistent in measuring the intended variables. Based on the reliability results in Table 1, all variables in this study showed excellent Cronbach's Alpha values above 0.7, which supports the conclusion that the instrument used is reliable for this study. This also confirms that each tested construct exhibits strong internal consistency.

4.2 Discriminant validity test results

Discriminant validity testing ensures that each construct within the measurement model is unique and does not correlate too highly with other constructs (Fornell & Larcker, 1981). Discriminant validity measures the extent to which different constructs can be distinguished from each other. In this study, discriminant validity was tested using the Fornell-Larcker criteria. The results indicate that the square root of the AVE for each construct is greater than the correlation between constructs, indicating that the construct is well separated from each other. The factor loading of each item is more than 0.70, further strengthening the discriminant validity of the tested constructs. Thus, convergent and discriminant validity have been achieved well in this research model. Based on test, it can be concluded that all constructs meet the requirements for discriminant validity. This is indicated by the diagonal values (in bold) being higher than the correlation values between constructs located in the same row and column.

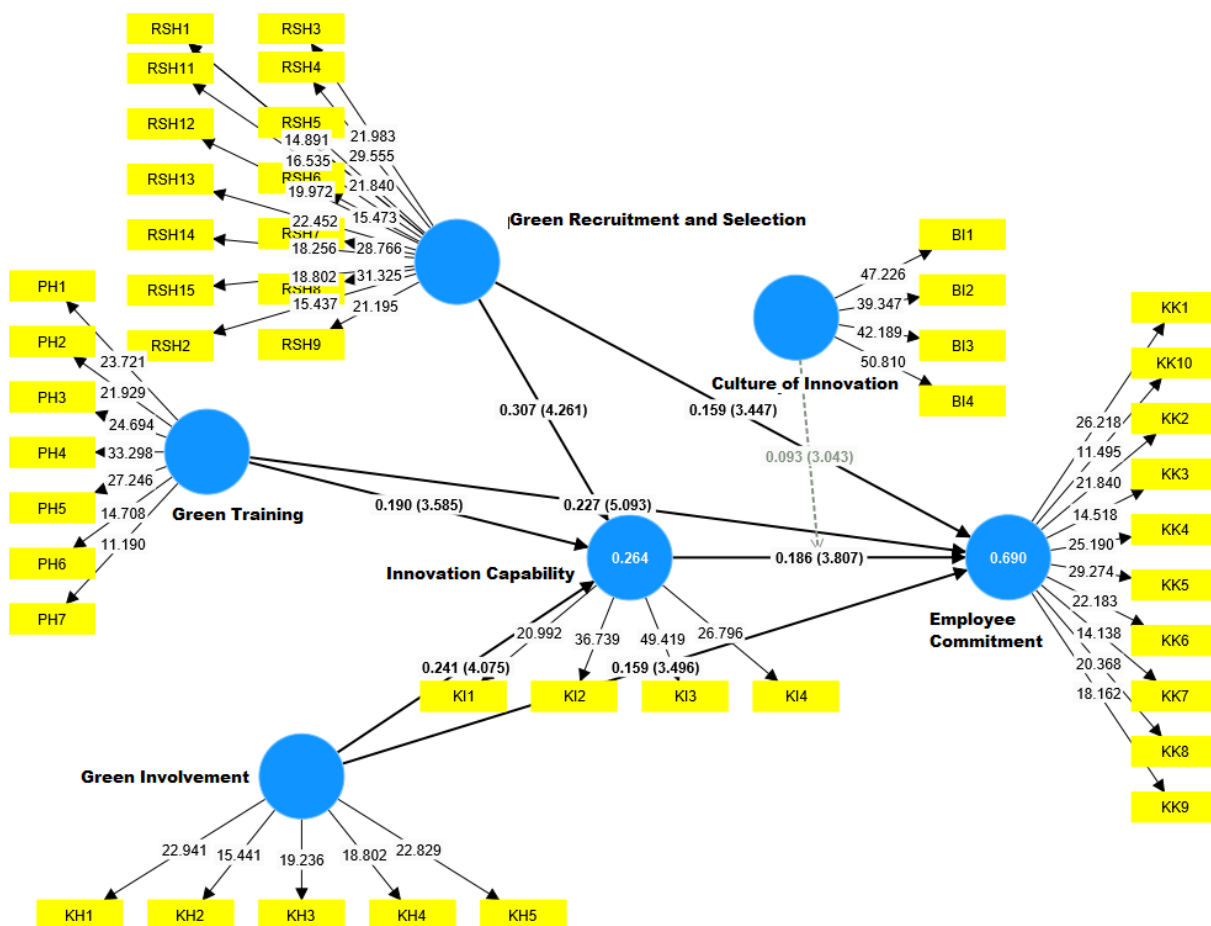
4.3 R-Square test results

The R-Square test is used to determine how much the independent variable is able to explain the dependent variable in a research model. Based on the R-Square Test Results, the R-Square value for the Innovation Capability variable is 0.264. This means that approximately 26.4% of the variability in innovation capability can be explained by independent variables in the model, such as culture of innovation and employee commitment. Meanwhile, the remaining 73.6% is explained by other factors outside the model. This value indicates that the contribution of independent variables to innovation capability is quite large, but not dominant, so there are likely other factors that also influence innovation capability.

4.4 Hypothesis test results

Figure 1

Hypothesis test results



5 DISCUSSION

5.1 The influence of green recruitment and selection on innovation capability (H1)

The first hypothesis states that Green Recruitment and Selection has a positive and significant influence on Innovation Capability. Based on the test results, the path coefficient shows a value of 0.159 with a p-value = 0.001, which indicates that this hypothesis is supported. Green recruitment practices, which prioritize environmental awareness, have been shown to enhance organizational innovation capabilities. This is consistent with the Resource-Based View (RBV) theory, which emphasizes that companies with innovative resources, such as employees who care about environmental

sustainability, will increase their competitiveness and innovation capabilities. Research by Yusliza et al. (2017) and Chaudhary (2018) supports these findings, stating that green recruitment brings in creative and sustainability-oriented employees, which ultimately increases the innovation capacity of the company.

5.2 The influence of green training on employee commitment (H2)

The second hypothesis states that green training has a positive and significant influence on innovation capability, which is proven. The test results show that green training has a positive and significant influence on innovation capability with a path coefficient of 0.227 and a p-value of 0.000, which means this hypothesis is accepted. Green training provides employees with skills and knowledge relevant to environmentally friendly practices, enabling them to develop new ideas and innovative solutions that support organizational sustainability. The Resource-Based View (RBV) theory supports these findings, as it considers employee knowledge and skills as valuable resources that are difficult for competitors to imitate. By providing sustainability-focused training, companies can enrich their human resources with competencies that support sustainable innovation, ultimately enhancing the company's innovation capabilities (Barney, 1991).

Previous research also supports a positive relationship between green training and innovation capabilities. For example, research by Jabbour et al. (2010) found that green training helps employees develop the skills needed to create greener and more efficient solutions, which increases organizational innovation. A similar finding was found by Jabbour (2015), who showed that green training strengthens employees' innovation capabilities, enabling them to contribute to developing innovative ideas based on sustainability. Research by Pham et al. (2019) also supports these findings, showing that green training broadens employees' understanding of sustainable business practices, which encourages them to innovate to create more environmentally friendly solutions. Therefore, green training plays a crucial role in enhancing innovation capabilities by equipping employees with the knowledge and skills to support the development of innovative solutions within a sustainable context.

5.3 The influence of green involvement on employee commitment (H3)

The hypothesis states that green involvement has a positive influence on employee commitment. Based on the test results, the path coefficient obtained is 0.241 with a p-value of 0.000, which indicates that green involvement has a positive and significant influence on employee commitment. Green involvement refers to the active participation of employees in environmental initiatives and decision-making processes related to corporate sustainability. When companies provide opportunities for employees to be involved in decisions related to environmentally friendly policies, employees feel more valued and have a sense of responsibility towards the company's sustainability goals. This finding is consistent with Stakeholder theory, which states that employee involvement in corporate decision-making, especially those related to sustainability, increases their emotional attachment and loyalty to the company (Ramus & Steger, 2000).

Research by Dumont et al. (2017) also supports these findings by showing that employee involvement in green initiatives strengthens their long-term commitment to the organization. Employees involved in green policies feel their values align with those of the company, which increases their affective commitment. Furthermore, Teixeira et al. (2012) highlighted that involvement in developing green solutions makes employees feel more connected to the company's long-term goals, which strengthens their commitment to sustainability. Therefore, these test results indicate that green involvement has a significant relationship with employee commitment, strengthening theories linking employee engagement in sustainability with increased commitment to the company.

5.4 The influence of innovation capabilities on employee commitment (H4)

The fourth hypothesis states that Innovation Capability has a positive and significant influence on employee commitment. Based on the test results, the path coefficient obtained was 0.186 with a p-value of 0.000, indicating that innovation capability has a positive and significant influence on employee commitment. Innovation capability refers to an organization's ability to create, adapt, and implement new ideas efficiently and sustainably, which in turn increases the organization's competitive advantage. Innovation is not only related to the development of new products or services, but also about creating more efficient and environmentally friendly solutions in

organizational operations (Maldonado-Guzmán et al., 2019; Jabbour et al., 2010). These results are consistent with the Resource-Based View (RBV) theory, which states that innovation as a valuable, rare, and difficult-to-imitate organizational resource plays a crucial role in maintaining competitive advantage and increasing the organization's attractiveness to employees.

Research by Jabbour et al. (2010) shows that innovation capability can increase employee satisfaction because they feel involved in processes that support organizational growth, which ultimately increases their commitment to the company. Shen et al. (2016) also found that innovative organizations are able to create greater value for employees, which increases their commitment to the company. Therefore, innovation capability plays a significant role in strengthening employee engagement and loyalty to the organization, reinforcing the finding that companies that focus on innovation are better able to retain committed employees. This test results confirm that innovation capability has a significant impact on employee commitment, indicating that innovation not only contributes to achieving competitive advantage but also enhances employees' emotional connection and attachment to the company.

5.5 Innovation capability mediates the relationship between green recruitment and selection and employee commitment (H5)

The fifth hypothesis states that innovation capability mediates the relationship between recruitment and selection on employee commitment. The test results show that innovation capability plays a significant role in strengthening this relationship, with a path coefficient value of 0.057 and a p-value of 0.002, indicating that this hypothesis is accepted. Sustainability-based GRS practices have a positive impact on employee innovation capability, which then increases their engagement and commitment to the company. The Resource-Based View (RBV) theory explains that companies with highly skilled and innovative employees can manage resources more effectively to create a competitive advantage (Barney, 1991). In this regard, recruitment that focuses on green values increases human resources who care about sustainability, which supports innovation and strengthens employee commitment. Research by Jabbour et al. (2010) supports this finding by stating that green recruitment introduces employees who are

creative and have high sustainability values, which increases their innovation and commitment to the organization.

5.6 Innovation capability mediates the relationship between green training and employee commitment (H6)

The sixth hypothesis states that innovation capability mediates the relationship between green training and employee commitment. The test results show that innovation capability plays a significant role with a path coefficient of 0.035 and a p-value of 0.011. This indicates that green training, which provides skills and knowledge about sustainability, not only strengthens innovation capability but also increases employee commitment. In Stakeholder theory, companies that support sustainability through green training increase employees' sense of moral responsibility, which encourages them to remain loyal and contribute to the organization (Freeman, 1984). Research by Teixeira et al. (2012) and Jabbour (2015) also shows that green training not only improves technical competence but also strengthens employee commitment by providing intrinsic value to their work, particularly in the context of sustainability. Thus, green training helps companies build a more innovative and sustainable work culture, which supports long-term organizational goals.

5.7 Innovation capability mediates the relationship between green involvement and employee commitment (H7)

The seventh hypothesis states that innovation capability mediates the relationship between green involvement and employee commitment. The test results show that innovation capability mediates this relationship with a path coefficient of 0.045 and a p-value of 0.009. Employee involvement in corporate sustainability practices enhances their innovation capability, which then strengthens their commitment to the company. In the context of Stakeholder theory, green involvement provides an opportunity for employees to feel valued and emotionally committed to the company, as they feel involved in the company's strategic decisions that support sustainability (Ramus & Steger, 2000). Research by Dumont et al. (2017) and Daily et al. (2009) supports this finding, by showing that employee involvement in green programs increases their creativity and

attachment to the organization, which in turn increases their commitment. Therefore, green involvement and innovation capability collaborate to encourage stronger commitment from employees, as they feel more connected to the company's goals and values.

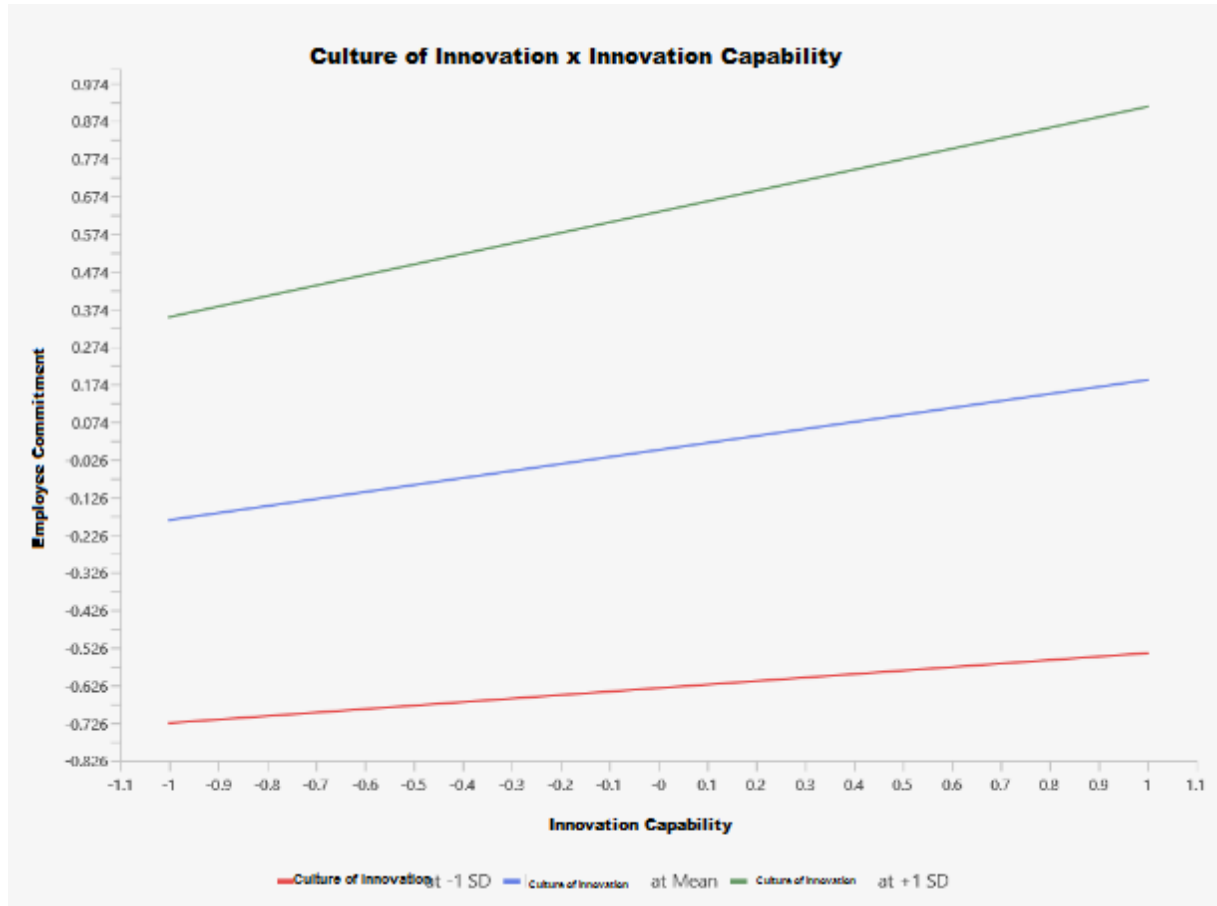
5.8 The influence of innovation capability on employee commitment with culture of innovation as a moderator (H8)

The eighth hypothesis states that Culture of Innovation moderates the relationship between Innovation Capability and Employee Commitment. The test results indicate that culture of innovation acts as a significant moderator, with a path coefficient of 0.093 and a p-value of 0.000, which supported the hypothesis. A strong culture of innovation increases employee involvement and commitment to the company, because employees feel valued in an environment that supports creativity and idea development. Research by Martins & Terblanche (2003) and Mumford & Gustafson (1988) supports this finding, showing that companies with a strong culture of innovation tend to be more successful in increasing employee commitment, because employees feel that they are part of the innovative process that supports the company's growth.

Based on Figure 2, it can be seen that the graph shows three lines depicting the relationship between IC and EC at three different levels of Culture of Innovation. When Culture of Innovation is low (-1 SD), average (Mean), and high (+1 SD). Of these three lines, the line representing a high Culture of Innovation (+1 SD) has the steepest slope, followed by the average line, and finally, the line for a low Culture of Innovation (-1 SD), which has the gentlest slope. This pattern indicates that the level of Culture of Innovation strengthens (positively moderates) the relationship between Innovation Capability and Employee Commitment. This means that increasing Innovation Capability will have a much greater impact on increasing Employee Commitment if supported by a strong Culture of Innovation, compared to if the Culture of Innovation is weak.

Figure 2

The moderating effect of culture of innovation on the relationship between innovation capability and employee commitment



5.9 Research implications

This study makes a significant contribution to the development of theories in the field of green human resource management (GHRM), innovation, and employee commitment with the Resource-Based View (RBV) and Stakeholder Theory by proposing that innovation capabilities developed through GHRM practices are not only rare and difficult to imitate resources, but also must be based on environmental sustainability values. Furthermore, this study also provides empirical evidence for Stakeholder Theory, emphasizing that organizational attention to the interests of internal stakeholders, especially employees, through GHRM policies, can create a simultaneous impact on individual performance and organizational reputation. Therefore, the results of this study

strengthen the idea that corporate social responsibility is not only to meet external demands, but also to build value and competitiveness from within the organization.

5.10 Managerial implications

The practical implications of this research are highly relevant for HR managers, organizational leaders, and practitioners in the fields of sustainability and innovation. The finding that green recruitment, training, and involvement have a direct and significant influence on employee innovation capability and commitment provides concrete guidance for organizations designing integrated GHRM programs. For example, in the selection process, organizations should incorporate criteria that reflect sustainability values and environmental concerns to achieve a value match between the individual and the organization (person-organization fit).

6 CONCLUSION

GHRM, consisting of green recruitment and selection, green training, and green involvement, has a direct and significant positive influence on innovation capability. Innovation capability has a significant positive influence on employee commitment. Meanwhile, innovation capability acts as a mediator in the relationship between GHRM and employee commitment, with culture of innovation being shown to moderate the relationship between innovation capability and employee commitment.

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Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy restrictions.

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