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DOING GOOD THROUGH HR: HOW GREEN HRM AND CSR PRACTICES SHAPE SUSTAINABLE PERFORMANCE VIA ENVIRONMENTAL CITIZENSHIP BEHAVIOR

Tanveer Asim[1], Muhammad Naeem Tariq[*2], Shumaila Asim[3],

[1]*Deputy Registrar (HR & Admin), Muhammad Nawaz Sharif University of Engineering and Technology, Multan, Pakistan.*
[*2]*Senior Vice President, Meezan Bank Ltd, Lahore, Pakistan.*
[3]*Relationship Manager, United Bank Limited, Lahore, Pakistan.*

[1]dy.registrarmnsuet@gmail.com, [2]naeemokara@yahoo.com, [3]shumailaasim073@gamil.com

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Muhammad Naeem Tariq

Abstract

Organizations face growing pressure to balance economic, environmental, and social goals, yet many struggle to turn sustainability commitments into real results. Drawing on the ability–motivation–opportunity (AMO) framework and stakeholder theory, this study examines how green human resource management (GHRM) and corporate social responsibility (CSR) influence sustainable performance through organizational citizenship behavior toward the environment (OCBE). It also examines whether green passion moderates the relationship between OCBE and sustainable performance. Survey data were collected from 342 employees working in fast-moving consumer goods (FMCG) manufacturing firms in Pakistan and analyzed using partial least squares structural equation modeling (PLS-SEM). The results show that both GHRM and CSR positively affect OCBE, with GHRM having a much stronger effect. OCBE, in turn, positively affects sustainable performance and mediates the effects of both GHRM and CSR on sustainable performance. Contrary to expectations, green passion did not moderate the relationship between OCBE and sustainable performance. The study contributes to the literature by examining GHRM and CSR together in one model and by identifying employees' voluntary green behavior as a key mechanism through which sustainability initiatives lead to sustainable performance. It also provides new insight into the limited role of green passion as a boundary condition.

INTRODUCTION

Sustainability has moved from the edges of business strategy to its center. Growing concern about climate change, resource depletion, and social inequality has placed organizations under pressure from governments, investors, customers, and employees to create economic value without harming the environment or society (United Nations, 2015). This expectation is reflected in the triple bottom line, which asks firms to balance

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economic, environmental, and social outcomes rather than focusing on profit alone (Elkington, 1997). Sustainable performance, therefore, reflects an organization's ability to achieve these three goals together (Mousa & Othman, 2020; Yong et al., 2020). Yet many organizations still struggle to turn sustainability commitments into real results. Research increasingly shows that technology and formal policies are not enough on their own, and that the everyday behaviors of employees play a decisive role in whether sustainability goals are achieved (Ren et al., 2018; Renwick et al., 2013).

Green human resource management (GHRM) has become one of the important approaches to engage people in sustainability. GHRM includes human resource practices like green recruitment, green training, green performance management, green rewards, and employee involvement that are geared towards environmental objectives (Renwick et al., 2013; Tang et al., 2018). These practices reflect the ability–motivation–opportunity (AMO) model (Appelbaum et al., 2000) as they increase employees' environmental knowledge, encourage responsible behaviour, and provide opportunities to participate in green practices. Evidence from empirical studies indicates that GHRM can foster employees' green behavior (Chaudhary, 2020; Dumont et al., 2017) and enhance environmental performance (Aftab et al., 2023; Kim et al., 2019). Other studies relate GHRM to broader sustainable performance (Obeidat et al., 2023; Yong et al., 2020; Zaid et al., 2018), and to citizenship behaviors, which extend beyond the scope of one's formal job (Freire & Pieta, 2022; Pham et al., 2019).

There is a second, related way: corporate social responsibility (CSR). CSR can be defined as actions and policies undertaken by organizations that are tailored to the specific context and consider the expectations of stakeholders and the triple bottom line of economic, social and environmental performance (Aguinis & Glavas, 2012). Previous studies on CSR have concentrated primarily on the impact of CSR on the firm-level, such as reputation and financial returns, while recent studies have shifted attention towards employees, revealing that employee perceptions of their company's social and environmental initiatives have an impact on their attitudes and behaviors (Glavas, 2016; Gond et al., 2017). When employees perceive their employers' responsible actions, they are likely to be proud, feel more attached to the company and respond with their extra efforts (Farooq et al., 2017, Newman et al., 2015). Moreover, perceived CSR is also observed to motivate employees to engage in voluntary pro-environmental behavior at work (Afsar & Umrani, 2020; Cheema et al., 2020; Raza et al., 2021). Importantly, CSR and GHRM are increasingly regarded as complementary as a corporate commitment to responsibility requires HR practices to implement it in daily working activities (Úbeda-García et al., 2021; Yusliza et al., 2019).

Organizational citizenship behavior (OCB) is used to understand the relation between GHRM and CSR and the improved sustainable performance. OCB is a type of behaviour that is not specified in the formal reward system, but which, when combined with other behaviours, helps the organization to function properly (Organ, 1988). Meta-analytic findings indicate that OCB is related to valued organizational outcomes including productivity, efficiency and customer satisfaction (Podsakoff et al., 2009). OCB is particularly pertinent to sustainability issues, as many green and social behaviours, such as energy saving, waste reduction, or sharing of green and social ideas, are not necessarily included in job descriptions and rely on employees' personal engagement (Boiral & Paillé, 2012). This process is explained by social exchange theory (Blau, 1964; Cropanzano & Mitchell, 2005): When the organization invests in green HR practices and acts responsibly, employees perceive it as caring and good values and respond in kind by engaging in extra-role behaviors. In line with this, Paillé et al. (2014) discovered that HRM is a positive influence on environmental performance, as a result of

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employees' citizenship behavior towards the environment.

But, OCB can not be expected to result in the same sustainable performance for all employees and green passion is a likely boundary condition. According to the dualistic model of passion, passion is a powerful tendency to engage in an activity that one likes, considers important and for which one invests time and energy (Vallerand et al., 2003). Green passion or "environmental passion" is a positive emotional connection to environmental activities and causes experienced by employees (Afsar et al., 2016; Robertson & Barling, 2013). Passionate employees are more engaged and persistent in their work (Ho et al., 2011; Perrewé et al., 2014) and those who are passionate about the environment exhibit more pro-environmental behavior at work (Li et al., 2020). Thus, it is possible to hypothesize that the positive impact of OCB on sustainable performance will be greater when green passion is high. However, green passion has been mostly investigated as a mediator between leadership and employee green behaviour, and the moderating effect of green passion has not yet been explored.

While previous research provides important information, there are a number of gaps. First, GHRM and CSR have mostly been studied within different research fields, and there is little understanding of how the two programmed interact and influence employee behaviours and organizational outcomes. Second, the existing literature has mainly focused on environmental performance or individual green behaviour and sustainable performance with its social dimension has been less studied (Amrutha & Geetha, 2020; Yong et al., 2020). Third, the mediating effect of OCB between the GHRM and CSR and sustainable performance has not been fully investigated. Fourth, the circumstances in which OCB is most likely to be effective, such as the importance of green passion, have not been sufficiently explored.

This study aims to fill these gaps by developing and testing a model in which GHRM and CSR are positively associated with sustainable performance via OCB and green passion moderates the relationship between OCB and sustainable performance. The study makes three main contributions by integrating social exchange theory, the AMO framework and the dualistic model of passion. It adds to the research on GHRM and CSR by demonstrating that both are influential in determining sustainable performance by means of employees' discretionary behavior. It also places OCB as a critical tool to enable the translation of organizational sustainability actions to tangible outcomes. Lastly, it proposes green passion as a boundary condition which accounts for the fact that some employees are more successful in sustainability outcomes with citizenship behavior than others. Practically, the results can assist managers in creating HR and CSR policies to create a workforce that is willing and passionate to achieve sustainable performance.

Theoretical Foundation

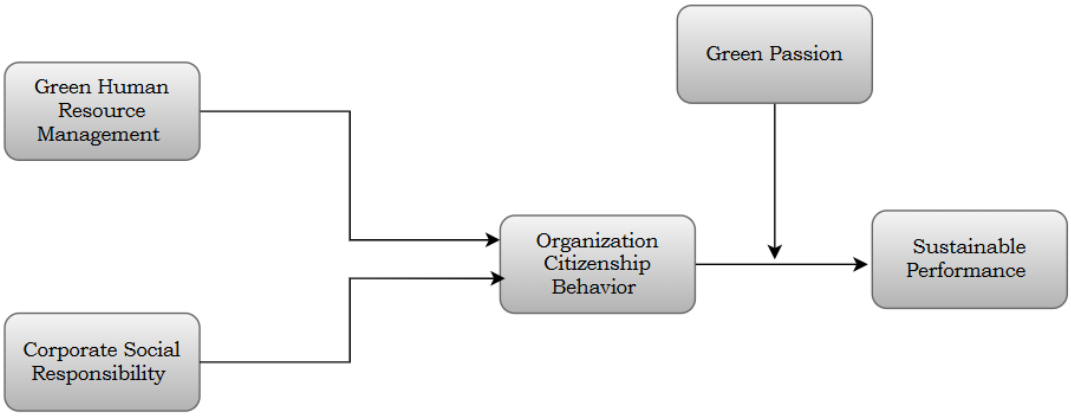
The relationships proposed in this study are explained by the ability–motivation–opportunity (AMO) framework and stakeholder theory. The AMO model of employee performance is based on three conditions: the ability, the motivation, and the opportunity to perform (Appelbaum et al., 2000; Blumberg & Pringle, 1982). These conditions are reinforced by human resource practices which influence employee outcomes (Jiang et al., 2012), and GHRM operates in a similar way (Renwick et al., 2013). Green training and recruitment increase environmental knowledge and skills, green appraisal and rewards encourage responsible behaviour and green involvement provides opportunities for employees to participate in sustainability efforts (Pinzone et al., 2016). These conditions make employees more likely and able to go the extra mile to do more than their formal job duties, which is why the relationship between GHRM and organizational citizenship behavior (OCB) is expected.

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Stakeholder theory is used to understand the concept of corporate social responsibility (CSR). It is a belief that organizations have an obligation to all stakeholders that impact or are impacted by their operations, not just shareholders (Donaldson & Preston, 1995; Freeman, 1984). Employees are internal stakeholders who have a first-hand view of the way their organization manages customers, communities and the natural environment (Aguilera et al., 2007). If the firm fulfills the expectations of the stakeholders in the CSR, employees perceive it as fair and caring and are likely to show discretionary behaviors like OCB (Glavas, 2016). The theory also helps to account for the relationship between OCB and sustainable performance. The ones that get relationships with multiple stakeholders right are more likely to generate value that lasts (Freeman et al., 2010; Harrison et al., 2010). Staff members that assist their colleagues, conserve resources and offer ideas for improvement contribute to the fulfilment of stakeholder requirements, thereby jointly supporting economic, social and environmental performance.

Moderating role of green passion is also supported by the AMO framework. The framework is based on the assumption that ability, motivation and opportunity are not independent of each other, but are interrelated, with performance being highest when ability, motivation and opportunity are all high (Blumberg & Pringle, 1982; Boxall & Purcell, 2011). Green passion is characterized by high level of internal motivation for environmental behaviors (Robertson & Barling, 2013; Vallerand et al., 2003). Employees with high green passion thus are likely to put more effort and persistence toward their citizenship behaviors, which enhances the impact of OCB on sustainable performance. The AMO framework explains the relationship between GHRM and green passion with employee behavior within the organization and stakeholder theory explains the relationship between CSR and employee citizenship with sustainable performance for a larger group of stakeholders.



Hypotheses Development

Green human resource management (GHRM) is an indication that the organization cares about the environment and provides the skills, motivation and opportunity for employees to do the same (Renwick et al., 2013). Consistent with the AMO model, the provision of green training, green rewards, and opportunities for involvement are associated with voluntary, extra-role behaviors (Pinzone et al., 2016). Empirical studies have been carried out that indicate that GHRM is positively associated with employees' citizenship behavior (Freire & Pieta, 2022; Pham et al., 2019) and workplace green behavior (Dumont et al., 2017).

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H1: GHRM has a positive effect on organizational citizenship behavior (OCB).
Stakeholder theory states that employees are a significant internal stakeholder who respond positively when their organization responds responsibly towards society and the environment (Aguilera et al., 2007). These perceptions foster pride and identification, which in turn motivate employees to act with discretionary behavior and give back (Farooq et al., 2017). Previous studies indicate that there is a positive relationship between perceived corporate social responsibility (CSR) and OCB (Newman et al., 2015) and there is a positive relationship between perceived CSR and citizenship behavior towards the environment (Cheema et al., 2020).

H2: CSR has a positive effect on OCB.
OCB contributes to the effectiveness of the organization since it encompasses the needs that cannot be adequately conveyed through formal job roles (Organ, 1988). Empirical studies have shown that OCB is positively related to productivity, efficiency and customer satisfaction (Podsakoff et al., 2009) and that environmentally oriented citizenship behavior is crucial for environmental management and performance (Boiral & Paillé, 2012; Paillé et al., 2014). These behaviours, from a stakeholder point of view, enable organizations to fulfil their economic, social and environmental expectations simultaneously (Freeman et al., 2010).

H3: OCB has a positive effect on sustainable performance.
The AMO framework suggests that the impact of HR practices on organizational outcomes is primarily through their impact on employees (Jiang et al., 2012). GHRM develops employees' green ability, motivation and opportunity, thus fostering OCB, which in turn leads to sustainable performance. In line with this, Paillé et al. (2014) discovered that the relationship between HRM and environmental performance is mediated by employees' citizenship behavior towards the environment.

H4: OCB mediates the relationship between GHRM and sustainable performance.
According to stakeholder theory, CSR creates value when stakeholders, including employees, respond to it (Harrison et al., 2010). Employees who perceive their organization as socially responsible reciprocate with OCB (Newman et al., 2015), and these behaviors help translate CSR commitments into real outcomes. Úbeda-García et al. (2021) similarly showed that CSR improves firm performance through internal mechanisms rather than directly, suggesting that employee behavior is a key channel.

H5: OCB mediates the relationship between CSR and sustainable performance.
The AMO framework suggests that motivation is not the only condition that can influence performance, but works best when coupled with other factors, such as when motivation is high (Blumberg & Pringle, 1982; Boxall & Purcell, 2011). Green passion is characterized by a high internal motivation to engage in green actions (Robertson & Barling, 2013; Vallerand et al., 2003). Passionate employees are more absorbed and engaged in their work (Ho et al., 2011) and their citizenship behaviors are likely to be performed with more energy and persistence, resulting in more sustainability outcomes. If green passion is low, the same behaviors can have a lesser impact.

H6: Green passion moderates the relationship between OCB and sustainable performance, such that the relationship is stronger when green passion is high.

Methodology
This model is well suited for a quantitative, cross sectional survey design, since all of the relationships are hypothesized in advance. One way to minimize common method bias would be to gather data in two waves, which could be spaced

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approximately three to four weeks apart (Podsakoff et al., 2003). During first wave, measure GHRM, CSR and green passion. The second is to measure OCB and sustainable performance.

Survey data were collected from 342 employees working in fast-moving consumer goods (FMCG) manufacturing firms in Pakistan. Selected firms that have formal environmental or CSR activities through purposive sampling. Use G*Power (Faul et al., 2009) to set the minimum sample size, and try to collect approximately 300 useable responses to accommodate dropouts between waves. Sustainable performance is an organization level outcome and may be called into question by the reviewers when it comes to employee ratings. Try to get it from a supervisor or manager, or make it explicit as perceived sustainable performance. PLS-SEM is suitable for a model that contains mediation and moderation (Hair et al., 2019).

Measurement

All constructs were measured using scales that were previously established and adapted from previous studies. The items were rated on a seven-point scale ranging from 1 (not at all) to 5 (to a great extent). Green human resource management (GHRM) was measured by 12 items adapted from Yong et al. (2020) that were divided into five dimensions: green recruitment (two items), green selection (two items), green training (three items), green performance evaluation (three items), and green rewards (two items). One item (GHRM7) was excluded because it did not meet the criterion of Hair et al. (2019) that loading must be greater than 0.708. Corporate social responsibility (CSR) was measured using a three-items. Organizational citizenship behavior was assessed by 10 items adopted from Anwar et al. (2020) and labeled as citizenship behavior toward the environment (OCBE). These items reflect eco-initiatives, eco-civic engagement and eco-helping (Boiral & Paillé, 2012). The 3 items were deleted due to low loadings, and 7 were retained. Green passion was assessed using 10 items adapted from Robertson and Barling (2013), including "I am passionate about the environment. Sustainable performance was assessed using 15 items that were adapted from Yong et al. (2020), of which five items were for economic, five for environmental and five for social performance.

Data analysis

Primarily analysis

Data were screened for missing values and no missing values were found [or: cases with more than 15% missing responses were removed] (Hair et al., 2022). Although PLS-SEM does not require normally distributed data (Hair et al., 2022), skewness and kurtosis values were within ± range indicating no serious departure from normality (Kline, 2016). In the single factor test conducted by Harman, the first factor accounted for 30% of the variance, which is below the 50% criterion (Podsakoff et al., 2003). Common method bias was not an issue as full collinearity VIF values were below 3.3 (Kock, 2015). The inner VIF values were below 3, which means that there was no multicollinearity (Hair et al., 2019).

Factor Loadings

Table 1: Outer Loadings

Construct	Items	Outer Loadings
Corporate Social Responsibility	**CSR1**	0.753
	CSR2	0.766
	CSR3	0.795
Green Human Resource Management	**GHRM1**	0.810
	GHRM2	0.791

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	GHRM3	0.877
	GHRM4	0.729
	GHRM5	0.854
	GHRM6	0.766
	GHRM8	0.816
	GHRM9	0.882
	GHRM10	0.825
	GHRM11	0.812
	GHRM12	0.796
Green Passion	**GP1**	0.822
	GP2	0.771
	GP3	0.857
	GP4	0.800
	GP5	0.843
	GP6	0.805
	GP7	0.774
	GP8	0.760
	GP9	0.875
	GP10	0.824
Organization Citizenship Behavior	**OCBE1**	0.812
	OCBE2	0.915
	OCBE3	0.790
	OCBE4	0.843
	OCBE5	0.873
	OCBE6	0.853
	OCBE7	0.843
Sustainable Performance	**SP1**	0.845
	SP2	0.835
	SP3	0.868
	SP4	0.828
	SP5	0.786
	SP6	0.812
	SP7	0.850
	SP8	0.829
	SP9	0.851
	SP10	0.857
	SP11	0.799
	SP12	0.828
	SP13	0.722

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	SP14	0.712
	SP15	0.843

The outer loadings for the indicator reliability test are presented in Table 1. All items loaded above the recommended threshold of 0.708 (Hair et al., 2019), ranging from 0.712 (SP14) to 0.915 (OCBE2). Each construct thus accounts for over half the variance in its indicators, indicating satisfactory indicator reliability (Hair et al., 2022). The loadings were 0.753 to 0.795 for the corporate social responsibility, 0.729 to 0.882 for green human resource management, 0.760 to 0.875 for green passion, 0.790 to 0.915 for organizational citizenship behavior, and 0.712 to 0.868 for sustainable performance. Item GHRM7 was deleted due to low loading, as per the guideline that weak indicators be deleted if it improves reliability and validity (Hair et al., 2022).

Table 2: Reliability analysis and Validity

	Cronbach's alpha	**Composite reliability**	**Average variance extracted**
Corporate Social Responsibility	0.815	0.815	0.595
Green Human Resource Management	0.956	0.956	0.665
Green Passion	0.952	0.951	0.663
Organization Citizenship Behavior	0.947	0.947	0.719
Sustainable Performance	0.968	0.968	0.671

The results of the internal consistency reliability and convergent validity are shown in Table 2. Cronbach's alpha values varied between 0.815 for corporate social responsibility and 0.968 for sustainable performance, while the composite reliability values were almost the same. All values exceeded the recommended cut-off of 0.70 (Hair et al., 2019), indicating that the items in each construct measure the same concept. The values for green human resource management (0.956), green passion (0.952) and sustainable performance (0.968) were marginally above 0.95, which might indicate some item overlap (Hair et al., 2019). These constructs were, however, assessed by scales with long standing history of reliability, and reliability coefficients tend to increase with the number of items (Cortina, 1993). The convergent validity was tested with the average variance extracted (AVE). All AVE values were above the 0.50 threshold value (Fornell & Larcker, 1981), ranging from 0.595 for corporate social responsibility to 0.719 for organizational citizenship behavior. Each construct thus accounts for over 50% of the variance of its items, indicating good convergent validity.

Discriminant Validity

Table 3: HTMT

Construct	**CSR**	**GHRM**	**GP**	**OCBE**	**SP**
Corporate Social Responsibility					
Green Human Resource Management	0.430				
Green Passion	0.445	0.581			
Organization Citizenship Behavior	0.389	0.603	0.555		

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Sustainable Performance	0.424	0.527	0.504	0.483	

The results of the Heterotrait–Monotrait ratio (HTMT) to test the discriminant validity are displayed in Table 3. Henseler et al. (2015) show that HTMT detects discriminant validity problems better than the traditional Fornell–Larcker criterion. The HTMT values were in the range of 0.389 (between corporate social responsibility and organizational citizenship behavior) to 0.603 (between green human resource management and organizational citizenship behavior). All values were below the conservative threshold of 0.85 (Kline, 2011) and the more liberal threshold of 0.90 (Henseler et al., 2015). Each construct is thus empirically different from the others in the model and represents a concept that is not represented by the other constructs. The measurement model was appropriate for testing the structural model (Hair et al., 2019) and was confirmed by establishing its discriminant validity.

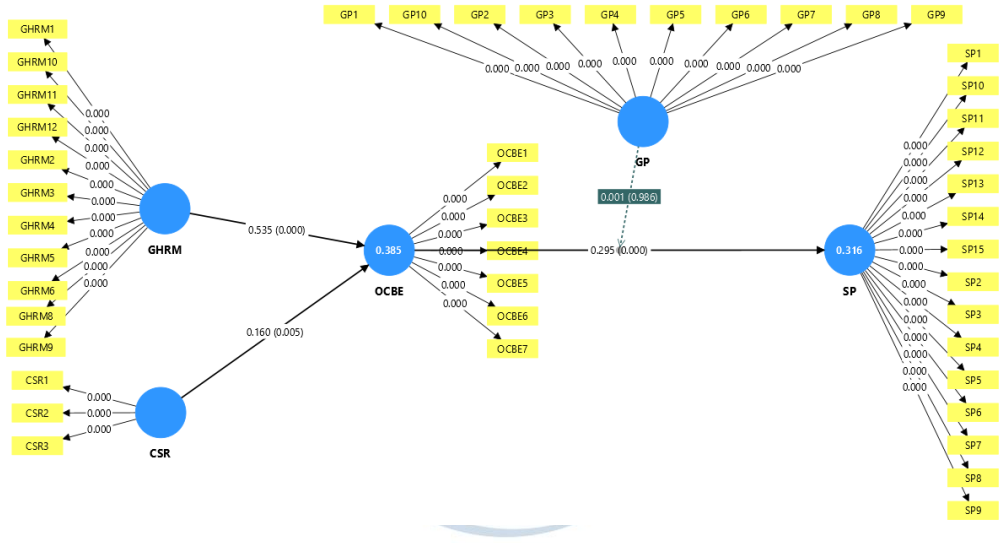


Table 4: Hypotheses Results

Construct	Original sample	Standard deviation	T statistics	P values
GHRM -> OCBE	0.535	0.048	11.230	0.000
CSR -> OCBE	0.160	0.057	2.821	0.005
OCBE -> SP	0.295	0.058	5.063	0.000
GHRM -> OCBE -> SP	0.158	0.037	4.307	0.000
CSR -> OCBE -> SP	0.047	0.019	2.442	0.015
GP x OCBE -> SP	0.001	0.045	0.018	0.986

The results of the structural model are shown in Table 4. Bootstrapping (Hair et al., 2019) was used to test the significance of the path coefficients. The results show that green human resource management has a strong positive and significant impact on organizational citizenship behavior (β = 0.535, t = 11.230, p < .001), which supports H1. The impact of CSR on OCB is also positive and significant (β = 0.160, t = 2.821, p = .005) which supports H2, but the impact is much weaker when compared to GHRM. In turn, OCB has a positive and significant impact on sustainable performance

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(β = 0.295, t = 5.063, p < .001), which supports H3. The indirect effects of OCB are significant between GHRM and sustainable performance (β = 0.158, t = 4.307, p < .001) and between CSR and sustainable performance (β = 0.047, t = 2.442, p = .015). This means that H4 and H5 are supported. Bootstrapping is appropriate for testing indirect effects as it does not require a normal sampling distribution (Preacher & Hayes, 2008). The findings indicate that GHRM and CSR lead to better sustainable performance primarily through the promotion of discretionary employees' behaviour.

However, the relationship between green passion and OCB was not significant (β = 0.001, t = 0.018, p = .986), which means that H6 was not supported. The relationship between OCB and sustainable performance is independent of employees' green passion. A potential explanation is that green passion has a direct influence on green behavior among employees, and is not a boundary condition. This would be in line with studies that consider environmental passion as a mediating mechanism (Afsar et al., 2016; Robertson & Barling, 2013).

Discussion

This study investigated the relationship between green human resource management (GHRM) and corporate social responsibility (CSR) and their impact on sustainable performance mediated by organizational citizenship behavior (OCB), and the moderating effect of green passion on the relationship between OCB and sustainable performance. Five of the six hypotheses were supported by the results.

The findings revealed that GHRM significantly positively influences OCB, thus supporting H1. This is aligned with previous research that found green HR practices motivate employees to do more than their jobs (Freire & Pieta, 2022; Pham et al., 2019). Green training, green rewards and green involvement are aligned with the AMO approach and develop employees' ability, motivation and opportunity to act for the organization and the environment (Pinzone et al., 2016; Renwick et al., 2013). The strongest predictor in the model was GHRM. This indicates that the HR practices that employees encounter in the day-to-day work environment have a significant influence on discretionary behaviour.

H2 was also supported by CSR, which had a positive impact on OCB. This agrees with studies showing that employees who see their organization as socially responsible respond with more citizenship behavior (Cheema et al., 2020; Newman et al., 2015). Employees are internal stakeholders who appreciate the fair treatment of society and the environment, and reciprocate by putting in extra effort (Aguilera et al., 2007; Glavas, 2016). But the impact of CSR was very weak as compared to GHRM. This could be because CSR activities are sometimes directed outside the company, towards customers and communities, and employees may not feel as personally engaged in these activities. Farooq et al. (2017) also found that internal CSR and external CSR have different impact on employee.

H3 was supported by a positive impact of OCB on sustainable performance. This result is consistent with the meta-analysis of evidence that OCB is a factor that enhances organizational effectiveness (Podsakoff et al., 2009). It is also consistent with studies that have established a link between environmental citizenship behavior and environmental performance (Boiral & Paillé, 2012; Paillé et al., 2014). Actions for sustainability are often voluntary, such as energy saving or recommending greener ways of working. The willingness of employees to do things on their own initiative therefore helps organizations to achieve economic, social and environmental goals together (Freeman et al., 2010).

H4 was supported by the mediation of OCB. Previous research has demonstrated that GHRM enhances sustainable performance (Yong et al., 2020; Zaid et al., 2018), and this study provides an explanation for this. The result confirms the AMO perspective, which indicates that HR practices have an impact on organizational outcomes via

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employee behavior (Jiang et al., 2012). It also resonates with Paillé et al. (2014) who concluded that there is a relationship between HRM and environmental performance through citizenship behavior.

The mediation of OCB between CSR and sustainable performance also was supported as shown in H5. CSR commitments seem to manifest in actual impact in part because they inspire employees to make voluntary contributions. This is in line with Úbeda-García et al. (2021) who demonstrated that CSR has a positive impact on firm performance by using internal mechanisms. But the effect was indirect, and small. CSR can also impact sustainable performance in other ways, for example by improving relationships with external stakeholders (Harrison et al., 2010).

Contrary to the expectations, green passion did not moderate the relationship between OCB and sustainable performance, and H6 was not supported. This is because green passion may have an earlier impact in the process – it could influence whether employees engage in green behavior or not, but not the extent to which the behavior leads to positive organizational outcomes. This perspective aligns with research that considers environmental passion as a mediator between leadership and employee green behaviour (Afsar et al., 2016; Li et al., 2020; Robertson & Barling, 2013). The second is that sustainable performance is an organization level outcome and requires systems, technology and management decisions. This means that it might be difficult to change the impact of employee actions on outcomes through individual passion. Finally, the dualistic model of passion separates harmonious from obsessive passion (Vallerand et al., 2003). If the two are combined as a single construct, they will offset one another.

Limitations and Future directions

This study has a few limitations that indicate future research. First, the data were obtained from self-report surveys cross-sectional and thus causal inferences can only be drawn. This is particularly relevant in the context of mediation, where indirect impacts are gradual and take place over time (Maxwell & Cole, 2007). Longitudinal designs might be used to validate the causal sequence between GHRM, CSR, OCB, and sustainable performance in future research. Second, employees rate sustainable performance, so the scores do not necessarily represent actual organizational results. Common method bias was not a major issue but in future studies, the performance data could be obtained from managers or from objective sources like sustainability reports (Podsakoff et al., 2003). Third, the sample was taken from fmcg in Pakistan and the results may not be valid for other sectors or cultural environments. Comparative studies between sectors and countries would help to test if they do. Fourth, the model did not have direct paths from GHRM and CSR to sustainable performance, therefore it was not possible to determine whether the mediation was full or partial. These paths should be added in the future research and other mediators like green innovation or organizational identification should be explored. Fifth, CSR was considered as a single variable, whereas internal and external CSR can have different impact on employees (Farooq et al., 2017). Lastly, the moderation effect of green passion on the relationship between OCB and sustainable performance was not observed. Future studies might consider evaluating green passion alone, or as a mediator (Robertson & Barling, 2013), or separately, as both harmonious and obsessive passion (Vallerand et al., 2003). They might also investigate organization-level moderators that influence the relationship between sustainability policies and employee green behaviors, for example green work climate (Norton et al., 2014).

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