The Impact of Green HRM Practices on Employee Performance: Mediating Role of Psychological Ownership in The Banking Sector of Pakistan

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Abstract

This paper investigates the mediating role of psychological ownership in the association between green human resource management and employee performance. The study utilized a quantitative research design based on data analysis of 980 employees from 20 commercial banks in Pakistan. Psychological ownership mediates the association between green human resource management practices and employee performance. The paper highlights the significance of green human resource management practices in fostering psychological ownership and enhancing employee performance in the workplace. For future studies, longitudinal designs with multiple sources and stages of data collection will be essential to gain a profound understanding of the relationship between the constructs. Testing across various organizational forms and cultures is recommended for a comprehensive assessment. Managers are encouraged to raise employee awareness through green human resource management practices to help employees attain a competitive edge by enriching their knowledge, skills, and abilities, enhancing their quality of life and work performance. This study contributes to the existing literature by offering a descriptive and practical elucidation of the role of psychological ownership among the employees of the banking sector in Pakistan in the connection between green human resource management practices and employee performance. The banks must recruit those individuals who have the knowledge and work for a sustainable environment, and they own their position at the workplace.

Keywords: *Psychological Ownership, Employee Performance, Green Human Resource Management Practices*

Introduction

Researchers have acknowledged the significance of considering employees in recent years due to the failure to implement planned green human resource (GHR) management practices (Aryee et al., 2012). Several studies have analyzed the mediating mechanisms explaining the relationship of GHR management practices with employee performance (EP), including the mediating role of job satisfaction (Liu et al., 2017), manager dedication (Kehoe & Wright, 2013), emotional intelligence (Messersmith et al., 2010), and motivation (Aryee et al., 2012), psychological contract breach (Sonnenberg et al., 2011), fairness (Heffernan & Dundon, 2016), and corporate social responsibility (Snape & Redman, 2010). However, research on the effectiveness of GHR management practices on EP still requires improvement compared to previous GHR management studies focusing on the same level. Guest (2011) suggested that more research is necessary to explore the links between GHR management and EP in different sectors of under-developing countries in the world. Boon et al. (2011) also noted that limited studies have specifically tested the relationship between GHR management practices and employee performance in the context of underdeveloped countries. Research continues to elucidate the basis for how GHR management practices affect employee productivity.

Moreover, the emerging GHR management literature is grounded in the fundamental idea that managerial performance is contingent on the dynamic between two groups: business principals (owners) and business agents (employees), whose objectives often diverge or conflict (Eisenhardt, 1989). According to the Agency Theory proffered by Jensen and Meckling (1976), a conflict exists between the principal and the agent. Employees cannot make decisions and act in the principal's best interest. Consequently, GHR management practices were developed to address the 'agency problem' of managing and monitoring banking sector employees. Wagner et al. (2003) proposed that fostering psychological ownership (PO) among employees involves shared beliefs and behavioral norms that align with the organization's best interests. Hence, ownership should be considered crucial in interpersonal relationships. As an employer, it is possible to proactively engage employees, regardless of whether they have PO. This concept will help us ascertain whether PO is a potent GHR management practice that impacts EP.

The study aims to investigate the mediating role of PO among GHR management practices and EP. The proposed hypothesis for PO is that PO mediates the relationship between the GHR management practices continuum and EP. Therefore, by probing the mediating role of PO, this

study contributes to and expands the knowledge of the mechanisms underlying the relationship between GHR management practices and EP research. A common framework is shown in Figure 1. The following paragraphs discuss the basic principles linking GHR management practices, PO, and EP. This preliminary study generates and tests hypotheses using a large sample of participants, including 980 employees from 20 commercial banks registered on the Pakistan Stock Exchange (PSX). Finally, we discuss the practical implications of the research.

Literature Review

Hypotheses development

The hypotheses to be tested include the direct effect of the level of GHR management practices on EP (H_1), the positive association between GHR management and PO (H_2), and the positive association between PO and EP (H_3). Taken together, PO mediates the effect of GHR management on EP at work (H_4). These hypotheses are illustrated in Figure 1.

Employee Performance and GHR Management Bundle Practices

No universally accepted HRM practices exist (Heffernan & Dundon, 2016; Liu et al., 2017). In conceptualizing HRM, we utilize the GHR management model proposed by Maawra and Bashir (2024) to gain insight into how it impacts EP. Research on the practical effects of GHR management on employee well-being still needs to be conducted (Boxall et al., 2016; Liu et al., 2017). Drawing from Van De Voorde et al. (2012), we conceptualize EP as satisfaction at work, including job fulfillment and dedication. Job satisfaction refers to a person's evaluation of different job attributes and emotional experiences in the workplace (Weiss & Cropanzano, 1996). Affective roles encompass feelings of emotion, identification, and organizational involvement (Allen & Meyer, 1990; Liu et al., 2017). The AMO (ability-motivation-opportunity) framework can be employed to define how GHR management practices may impact EP. The framework predicts that skilled workers encouraged to contribute and utilize their skills and abilities will likely experience greater PO and dedication, leading to excellent employee performance (Appelbaum et al., 2001). Moreover, personnel selection can assist in identifying candidates with the highest expertise, aptitudes, and capabilities (Schmelter et al., 2010; Liu et al., 2017). Ample training and collective learning can assist workers in expanding their command and generating new ideas (Shipton et al., 2006). Rewards and compensation based on innovation and enhanced employee performance and improvement can encourage employees to make more efforts in the

workplace (Liu et al., 2016). Practices such as large-scale job design (Jong et al., 2015), diverse work processes (Seibert et al., 2001), and worker dedication at work (Huselid, 1995) can help workers identify and seize prospects (Liu et al., 2017).

Likewise, job satisfaction is linked to opportunities for skill enhancement and employee involvement (Boxall & Macky, 2009). If GHR management practices enable employees to participate in decision-making (Wu & Chaturvedi, 2009), they are more inclined to feel content in their roles and receive additional development and training for environmental practices to enhance their knowledge and skills (Wu & Chaturvedi, 2009; Liu et al., 2017). In literature, researchers and academicians illustrated that by supplying growth opportunities and supporting workers in honing their skills, capabilities, and knowledge results in heightened commitment levels (Zaleska & De Menezes, 2007). Researchers discovered that empowering employees contributes to organizational commitment and job satisfaction (Humborstad & Perry, 2011). GHR management also significantly enhances employees' performance by boosting their financial well-being, endorsing the use of their valuable skills, capabilities, and knowledge within the company (Delery, 1998; Liu et al., 2017), promoting these competencies (Liao et al., 2009), enabling them to confront in informal or cooperative behaviors as opposed to socialization, self-improvement, or non-cooperation (Leana & Van Buren, 1999), and designating work standards that foster confidence and association within the company (Horgan & Mühlaub, 2006; Liu et al., 2017). Recent studies have further sustained a robust association between GHR management practices and EP (Liao et al., 2016). As a result, we propose that GHR management has a positive correlation with EP.

H_1: GHR management practices are positively related to employee performance.

Psychological Ownership and GHR Management Bundle Practices

Pierce et al. (1991) presented the concept of PO, which means that employees discern that the target of ownership or a piece of it is 'MINE' (Liu et al., 2017). These feelings of ownership or belonging are related to the purpose of personal ownership and the person, where purpose is closely related to ownership and a larger entity (Belk, 1988). PO can be developed in various organizational contexts, such as organizations, groups, and work (Van Dyne & Pierce, 2004). Furthermore, PO can be expressed in three interrelated ways: organizational control without regard to legitimate interests, organizational importance, and investment in the organization (Liu

et al., 2017). Based on the framework mentioned above (Appelbaum et al., 2000), we present that GHR management practices can promote PO, which gives employees the ability, power, and opportunity to control, define, and invest in the organization. First, organizational control through GHR management can help enhance PO. For example, employees have greater control over job performance, schedules, and the autonomy built into the work environment (Wright & Cordery, 1999), and the literature has consistently demonstrated support for this positive relationship between freedom and perceived control (Tanaka & Yamauchi, 2000; Liu et al., 2017).

Workers can gain control over their jobs and the companies via better knowledge and aptitudes (Huselid, 1995; Liu et al., 2017). In addition, from the employees' point of view, through the career management process, employees can be motivated to control important factors for career development (Thornton, 1978), including knowledge and skills crucial to the company (Doyle, 2000). They can continue to learn independently, gain participation and control over their jobs, and acquire relevant experience. Moreover, employees can attain decision-making power and exert greater effect over management processes through workers' participation and authorization (London, 1993). Pierce et al. (2004) found a positive association between individual job performance experience and PO.

Second, a better understanding of the organization through GHR management can help improve organizational performance (PO). For instance, employees gain insights into their jobs and the organization during activity (Noe, 1986). Employee involvement also involves sharing information and knowledge among employees, aiding their comprehension and adaptation to the organization (Huselid, 1995). Furthermore, employees can voluntarily provide work and family information through a career management system (Dessler, 2004). Third, community investments through GHR management can also enhance PO. For instance, Frayne and Latham (1) demonstrated that job involvement increased following self-management training. Pay-based rewards motivate employees to invest in their work and the organization (Milkovich & Wigdor, 1991). A strong work ethic is important in professional development and growth (Thornton, 1978). Decision-making and participation necessitate significant strategy and effort within the organization (Liu et al., 2017). Additionally, employees are inclined to work harder to contribute to the companies within the framework of the GHR management practices.

Therefore, GHR management practices, based on the AMO (Appelbaum et al., 2000), have the potential to promote PO by contributing to corporate control, corporate awareness, and corporate investment. O'Driscoll et al. (2006) found a favorable association between decision-making and PO. Chang et al. (2012) findings reflect that the GHR management practices had a positive effect on people with mental disorders in a cross-sectional study. Therefore, we assume that the GHR management is positively associated with the PO level.

H_2 :GHR Management is positively related to psychological ownership.

Employee Performance and Psychological Ownership

Employees' attitudes, behaviors, and performance are part of organizational psychology (Pan et al., 2014). Compared to similar factors, goals developed by individuals with a normal mindset are received positively (Beggan, 1992) and show affection (Beggan, 1992). Additionally, efficiency and rationality are linked to control over situations, while possessing can increase participation (Ogilvie, 1986). The concept is allied with a sense of belonging, enhancing individuals' well-being and security (Van Dyne & Pierce, 2004) and increasing participation (Meyer & Allen, 1991). Therefore, employees who develop organizational psychology will likely offer general feedback to the organization in evaluation cases, boosting employee satisfaction. Strong emotional attachment in the form of love and affection plays a crucial role in fostering employees' commitment to the company. Literature proves the relationship between PO and EP. In the job design literature, perceived control and autonomy are good job satisfaction predictors, leading to better performance (Hackman & Oldham, 1980; Liu et al., 2017). Pierce et al. (1991) indicated that psychological well-being fosters job and organizational commitment. Additional research has shown that employees who feel a sense of belonging demonstrate higher levels of job satisfaction and stronger commitment (Vandewalle et al., 1995). Mayhew et al. (2007) found that PO positively predicted job satisfaction and self-efficacy. It is logical that when employees develop high levels of PO, they will be more content with their work and more committed, engaged, and dedicated to their organizations (Liu et al., 2017). Therefore, we hypothesize that PO is associated with job satisfaction and positive commitment. We use personal growth theory to explain why PO may work in the workplace. Drawing on personal growth theory (Jones, 1973), as people develop PO, the family becomes a larger part of their self-concept. Therefore, to create their view of themselves as competent, they expend more

energy and work to grow, develop, and spend time with the family. They also understand that the organization overseeing the PO is responsible and shares the burden (Pierce et al., 2001), which leads to better performance. Therefore, we support the development of PO in personnel to enhance their performance. Consequently, we assume that PO is positively related to job performance.

H_3: Psychological ownership is positively related to employee performance.

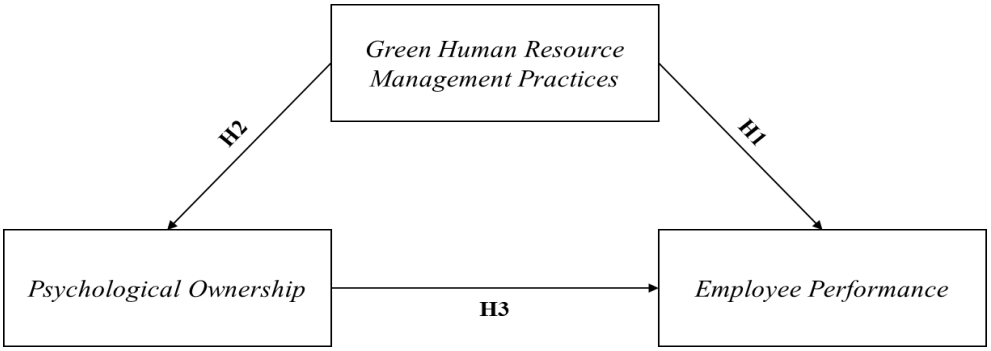
Employee Performance, GHR Management Bundle Practices, and Psychological Ownership

Ownership psychology offers a different perspective on how and why GHR management affects EP. Little research examines the impact of ownership fit on the relationship between GHR management and EP. This study assumes that PO is the mediating variable between GHR management and EP. GHR management was reported by AMO (Appelbaum et al., 2000) and PO (Epstein, 1973). However, it must be more specific and directly focused on the GHR management bundle practices. Based on these reasons and explanations, it is clear that PO mediates the effects of GHR management on EP.

Psychological ownership mediates the relationships between GHR management and employee performance.

Figure 1

Study Framework



Source: Author Construction

Figure 1 shows the graphical representation of the model, where GHR management is the independent variable, PO is the mediating variable, and EP is the dependent variable. H1, H2, and H3 show the study's hypotheses, tested using regression analysis. There is a dearth of

knowledge regarding GHR management practices in Pakistan's banking sector. Barron & Kenny's (1986) mediation approach is used to test the mediating role of psychological ownership between GHR Management Practices and Employee Performance.

Research Methodology

Sampling Procedures and Participants

To ensure the accuracy and consistency of the study, we collected data using the survey technique and a questionnaire tool. The research data was gathered from employees working in banks listed on Pakistan's Stock Exchange. At each stage, online tools, social media apps, and email correspondence were utilized to explain the data collection process and encourage participation. A representative from each bank was requested to participate in the data collection. The sample was purposively selected to include various occupations, professions, genders, age groups, and education levels. Each survey was accompanied by a questionnaire that explained the study's objectives and reassured participants about the importance of their answers and their willingness to participate. Senior executives (president/vice president) provided information on the industry, age distribution, company size, and HRM. In contrast, employees provided information on gender, age, education, PO, and EP. By collecting more data, common method bias was reduced. We distributed questionnaires to over 1200 employees from 20 banks, resulting in 980 usable and complete responses. The content validity of the questionnaire was assessed; feedback was obtained from five academicians and five field experts. The questionnaire was adopted from the previous studies.

Variables and Measures

The survey technique and the questionnaire were used as a data collection tool. The questionnaire was designed in such a way that it is easily readable and understandable. The five-point Likert scale (1 = strongly disagree, 5 = strongly agree) was used to quantify the responses.

Table 1
Variables and Measurement Tool

S.No.	Variable	Variable Name	Items	Author
1.	Dependent	Employee Performance	15	Tsui et al. (1997)
2.	Independent	Green Human Resource Management	6	Liu et al. (2017)
3.	Mediator	Psychological Ownership	12	Dyne and Pierce (2004)

The GHR management practices were assessed based on four main dimensions: green job design, selection, training, and rewards. Liu et al. (2017) evaluated GHR management using a 15-item scale. PO was measured using a six-item scale developed by Van Dyne and Pierce (2004). EP: In line with Tsui et al. (1997), generic items were chosen over job-specific ones due to the wide variation in employees' tasks based on their jobs, organizations, and industries. Job performance was evaluated using a twelve-item scale focusing on employees' efficiency, quality, and effectiveness. All participants provided written informed consent as required by the research protocol to confirm their agreement to participate in the study.

Findings

Measurement Model

Table 2 displays the outer loadings for the variables. Each EP item (EP1 to EP12) assesses EP. The outer loadings, ranging from 0.723 to 0.866, indicate the strength of the correlation of each item with the EP latent variable. Higher loadings, closer to 1, suggest a stronger relationship. GJD items (GJD1 to GJD4) evaluate aspects of the green job description. The outer loadings, ranging from 0.78 to 0.859, similarly indicate the strength of each item's relationship with the GJD latent variable. GR items (GR1 to GR3) measure green rewards. Outer loadings, ranging from 0.586 to 0.922, demonstrate how well each item captures the GR construct. GS items (GS1 to GS5) assess green selection practices. Outer loadings, ranging from 0.602 to 0.899, indicate their relationship with the GS latent variable. GT items (GT1 to GT3) evaluate green training effectiveness. Outer loadings, ranging from 0.637 to 0.895, show how each item contributes to the GT latent variable. GHR management items evaluate overall green HRM practices. Outer loadings range from 0.631 to 0.72, indicating their relationship with the HRM latent variable. PO items (PO1 to PO6) assess PO. Outer loadings, ranging from 0.702 to 0.819, demonstrate their strength in capturing the PO latent variable.

Table 2
Outer Loadings

	EP	GJD	GR	GS	GT	HRM	PO
EP1	0.763						
EP10	0.808						
EP11	0.857						
EP12	0.866						

EP2	0.794					
EP3	0.823					
EP4	0.765					
EP5	0.814					
EP6	0.782					
EP7	0.728					
EP8	0.723					
EP9	0.786					
GJD1		0.78				
GJD1					0.631	
GJD2		0.85				
GJD2					0.552	
GJD3		0.859				
GJD3					0.573	
GJD4					0.573	
GJD4		0.832				
GR1					0.586	
GR1			0.911			
GR2			0.908			
GR2					0.602	
GR3			0.922			
GR3					0.593	
GS1				0.815		
GS1					0.602	
GS2					0.677	
GS2				0.852		
GS3					0.627	
GS3				0.899		
GS4				0.858		
GS4					0.72	
GS5					0.671	
GS5				0.857		
GT1					0.637	
GT1					0.863	
GT2					0.895	
GT2					0.704	
GT3					0.881	
GT3					0.646	
PO1						0.702
PO2						0.819
PO3						0.716

PO4	0.794
PO5	0.793
PO6	0.78

Generally, outer loadings above 0.5 are considered acceptable, indicating that the item adequately represents the latent variable. Higher loadings (closer to 1) indicate stronger item reliability and validity for measuring the intended latent construct. Items with lower loadings may indicate potential issues with their contribution to measuring the latent variable and may need further evaluation or refinement.

Table 3
R-Square

	R-square	R-square adjusted
EP	0.316	0.314
HRM	1	1
PO	0.337	0.336

These values indicate that the independent variables (likely the items measuring EP) collectively explain approximately 31.6% (R-squared) of the variance in the dependent variable EP. The adjusted R-squared, which considers the number of predictors and adjusts for the degrees of freedom, is slightly lower at 31.4%. About 31.4% of the variance in EP can be explained by the items measuring EP in the model. These values indicate that the items measuring PO explain approximately 33.7% (R-squared) of the dependent variable PO variance. The adjusted R-squared, which again adjusts for the number of predictors, is 33.6%. It means that about 33.6% of the variance in PO can be explained by the items measuring PO in your model. The r-square basically tells the percentage of variation, explained by the independent variables in the dependent variable.

Table 4
F-Square

	EP	GJD	GR	GS	GT	HRM	PO
EP							
GJD						2570.323	
GR						2073.575	
GS						5978.098	
GT						2638.549	
HRM	0.07						0.508

PO	0.439

The F-square results reveal how factors contribute to EP within green organizational practices. Green Selection (GS) emerges as the most influential factor, with a substantial F-square value of 5978.098, indicating that selecting employees based on green criteria profoundly impacts enhancing EP. Green Training (GT) follows closely with an F-square of 2638.549, underscoring the importance of effective training programs focused on green practices in improving EP. Green Job Description (GJD) and Green Reward (GR) also play significant roles, with F-square values of 2570.323 and 2073.575, respectively, emphasizing the importance of clear job roles aligned with sustainability goals and rewarding green behaviors. In contrast, PO shows a moderate effect with an F-square of 0.439, suggesting that employees' sense of ownership towards their work and the organization contributes meaningfully but to a lesser extent compared to GS, GT, GJD, and GR. GHR management exhibits the smallest influence with an F-square of 0.07, indicating that while GHR management practices focusing on sustainability are important, their direct impact on EP within this model is minimal. F-square basically tells the combined effect of the variables. These findings highlight the critical role of GS, GT, GJD, and GR initiatives in driving higher EP in organizations committed to sustainable practices while acknowledging the nuanced contributions of PO and the limited impact of GHR management in directly influencing EP in this specific context.

Table 5
Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
EP	0.947	0.953	0.953	0.63
GJD	0.85	0.85	0.899	0.69
GR	0.901	0.901	0.938	0.835
GS	0.909	0.911	0.932	0.734
GT	0.854	0.857	0.912	0.775
HRM	0.89	0.893	0.907	0.394
PO	0.861	0.864	0.896	0.591

The reliability and validity metrics provided offer a comprehensive assessment of the Measurement model's robustness for various constructs related to green organizational practices.

Across the board, the constructs demonstrate strong reliability, as evidenced by high Cronbach's alpha values and consistent composite reliability scores. Specifically, EP (EP), Green Reward (GR), Green Selection (GS), and Green Training (GT) exhibit particularly high reliability, each with Cronbach's alpha exceeding 0.85 and composite reliability around or above 0.90. Green Job Description (GJD), Green Human Resource Management (HRM), and PO also show good reliability, with Cronbach's alpha ranging from 0.85 to 0.89 and composite reliability scores consistently above 0.85.

In terms of validity, most constructs display strong convergent validity, with Average Variance Extracted (AVE) values largely exceeding 0.5. GR stands out with an AVE of 0.835, indicating that over 83% of the variance in GR is explained by its items. EP, GS, and GT also show robust convergent validity, with AVE values ranging from 0.63 to 0.775. PO demonstrates good convergent validity with an AVE of 0.591, while GJD and HRM, though reliable, exhibit slightly lower AVE values, suggesting they may benefit from further validation. These findings collectively affirm the reliability and validity of the measurement model in effectively capturing the intended constructs related to green practices. They underscore the model's ability to accurately assess factors influencing EP and organizational practices in sustainable contexts, offering valuable insights for enhancing organizational strategies and policies.

Table 6
Discriminant Validity (HTMT)

	EP	GJD	GR	GS	GT	HRM	PO
EP							
GJD	0.19						
GR	0.138	0.603					
GS	0.195	0.33	0.221				
GT	0.327	0.384	0.396	0.567			
HRM	0.286	0.84	0.744	0.841	0.832		
PO	0.556	0.271	0.358	0.598	0.645	0.651	

The HTMT (Heterotrait-Monotrait) ratio of correlations test results provides a comprehensive assessment of discriminant validity among the constructs in the measurement model focused on green organizational practices. Each construct—EP, Green Job Description (GJD), Green Reward (GR), Green Selection (GS), Green Training (GT), Green Human Resource Management (HRM), and PO—shows distinctiveness from the others based on the HTMT values. Across the

board, all HTMT values are well below the threshold of 0.85, indicating strong discriminant validity. It implies that each construct in the model measures unique aspects of its respective domain without significant overlap with the others. Specifically, EP, GJD, GR, GS, GT, HRM, and PO demonstrate discriminant validity by maintaining HTMT values ranging from 0.138 to 0.841, affirming that they are sufficiently distinct entities within the framework of the study. These findings underscore the robustness of the measurement model in accurately capturing and distinguishing the various dimensions of green organizational practices, thereby providing a reliable basis for analyzing their impacts on EP and organizational outcomes.

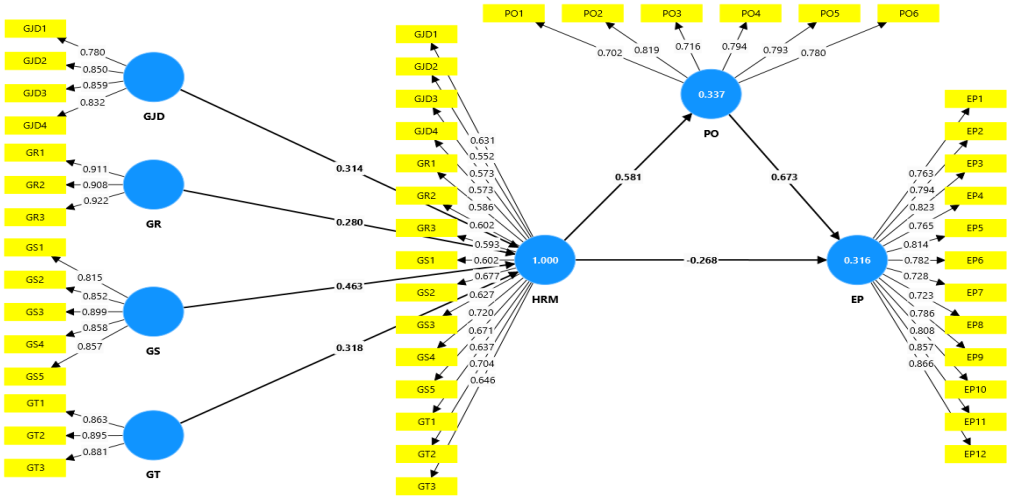
Table 7
Discriminant Validity (Fornell-Larcker)

	EP	GJD	GR	GS	GT	HRM	PO
EP	0.793						
GJD	-0.125	0.831					
GR	-0.078	0.529	0.914				
GS	0.189	0.296	0.202	0.857			
GT	0.301	0.332	0.347	0.506	0.88		
HRM	0.123	0.704	0.65	0.773	0.754	0.628	
PO	0.518	0.231	0.309	0.528	0.554	0.581	0.768

The discriminant validity of the Fornell-Larcker criterion assesses whether the Average Variance Extracted (AVE) square root for each construct is greater than the correlations between that construct and all other constructs in the model. In the correlation matrix provided, each diagonal element represents the AVE of the corresponding construct. The AVE of the construct EP is 0.793. Comparing this with the correlations between EP and other constructs (ranging from -0.125 to 0.518), EP meets the criterion for discriminant validity because 0.793 (AVE of EP) is greater than the absolute values of all correlations involving EP. Similarly, for GJD (Job Design), GR (Green Reward), GS (Green Selection), GT (Green Training), GHR management, and PO (Psychological Ownership), their AVE values (0.831, 0.914, 0.857, 0.88, 0.754, and 0.768 respectively) are all greater than the correlations involving these constructs with others. Therefore, based on the Fornell-Larcker criterion, discriminant validity is supported for all constructs in the model. Each construct demonstrates sufficient distinctiveness from the others, as indicated by the AVE being higher than the correlations between it and other constructs. The outcome suggests that the measurement model adequately distinguishes between the constructs

under consideration, affirming the model's validity for further analysis and interpretation in research or practical applications.

Figure 2
Measurement Model

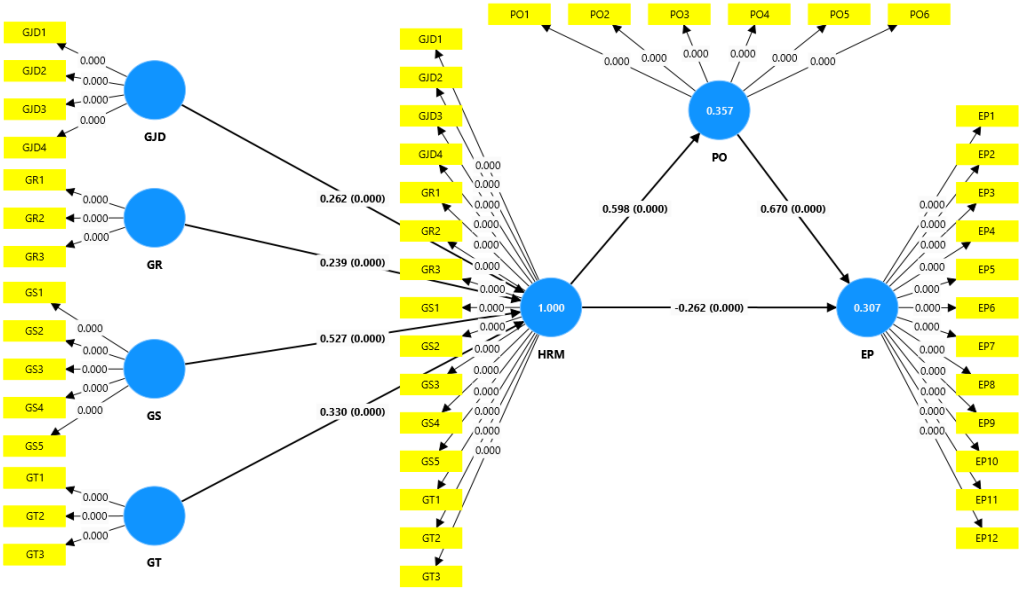


Source: *Author Construction*

Structural Equation Model

Figure 3 shows the graphical representation of the structural equation model for the study. It shows that four dimensions of the GHR management were used in the study, as discussed in the previous chapter, including green selection, training, reward, and job description. The beta coefficients and the square can easily be identifiable in Figure 3.

Figure 3
Structural Equation Model



Source: Author Construction

The path coefficients presented in the analysis reveal significant relationships among the variables examined in the model. Green Job Description (GJD) shows a positive and moderately strong influence on GHR management, with a path coefficient of 0.262. Similarly, Green Reward (GR), Green Selection (GS), and Green Training (GT) also exhibit positive relationships with GHR management, with coefficients of 0.239, 0.527, and 0.33, respectively, indicating that these factors contribute positively to GHR management practices within the studied context. Conversely, GHR management demonstrates a negative impact on EP, evidenced by a path coefficient of -0.262, suggesting that higher HRM involvement may correspond to lower EP outcomes.

Table 8
Path-Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
GJD -> HRM	0.262	0.261	0.015	17.376	0
GR -> HRM	0.239	0.238	0.012	19.248	0
GS -> HRM	0.527	0.528	0.02	26.623	0
GT -> HRM	0.33	0.33	0.011	29.629	0
HRM -> EP	-0.262	-0.263	0.035	7.492	0
HRM -> PO	0.598	0.599	0.023	25.555	0
PO -> EP	0.67	0.671	0.029	23.116	0

The path coefficients presented in the analysis reveal significant relationships among the variables examined in the model. GJD shows a positive and moderately strong influence on GHR management, with a path coefficient of 0.262. Similarly, GR, GS, and GT also exhibit positive relationships with GHR management, with coefficients of 0.239, 0.527, and 0.33, respectively, indicating that these factors contribute positively to GHR management practices within the studied context. Conversely, GHR management demonstrates a negative impact on EP, evidenced by a path coefficient of -0.262, suggesting that higher GHR management involvement may correspond to lower EP outcomes. On the other hand, GHR management shows a robust positive association with PO, as indicated by a substantial path coefficient of 0.598. Moreover, PO significantly enhances EP, with a notable path coefficient of 0.67, emphasizing the role of compensation structures in driving performance outcomes. All path coefficients exhibit exceptionally low p-values (all zeros), signifying high statistical significance across the board. These findings underscore the importance of job-related factors, GHR management practices, and compensation strategies in shaping organizational dynamics and employee outcomes within the studied framework. The results suggest that enhancing job security, teamwork, growth opportunities, and aligning GHR management strategies with competitive pay and benefits can positively influence organizational effectiveness and EP.

Table 9
Total Indirect Effect

12	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
GJD -> EP	0.036	0.036	0.008	4.804	0
GJD -> PO	0.157	0.156	0.009	16.807	0
GR -> EP	0.033	0.033	0.007	4.779	0
GR -> PO	0.143	0.142	0.008	17.354	0
GS -> EP	0.073	0.074	0.018	4.026	0
GS -> PO	0.315	0.316	0.018	17.931	0
GT -> EP	0.045	0.046	0.011	3.992	0
GT -> PO	0.197	0.198	0.011	18.276	0
HRM -> EP	0.4	0.402	0.026	15.422	0

The results highlighted the indirect effects of various factors on EP through their impact on PO and the direct effect of GHR management on EP. Each path coefficient signifies the influence of a predictor variable on EP mediated through PO, with their statistical significance evaluated by T

statistics and P values. Initially, GJD exhibits a modest indirect effect on EP through PO, with a path coefficient of 0.036, indicating that enhancements in GJD contribute positively but moderately to EP when mediated by PO. Similarly, GR has a slightly indirect effect on EP through PO, with a path coefficient of 0.033, suggesting that improving green rewards can marginally enhance EP through compensation mechanisms. GS shows a more pronounced indirect effect on EP through PO, with a path coefficient of 0.073, indicating a stronger impact than GJD and GR. GT follows a similar trend, with an indirect effect on EP through PO reflected in a path coefficient of 0.045, albeit slightly smaller than GS.

Moreover, GHR management has a significant indirect impact on EP through PO, with a path coefficient of 0.4. This implies that efficient GHR management practices notably boost EP, primarily influenced by the quality of the provided PO. All path coefficients are statistically significant with p-values of 0, indicating strong relationships in the original sample. These results highlight the significance of both direct influences and indirect pathways through which organizational aspects like GJD, GR, GS, GT, and GHR management practices affect EP through compensation structures. Effective management of these elements enhances overall performance outcomes within the examined context.

Table 10
Total Specified Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
GJD -> HRM -> PO	0.157	0.156	0.009	16.807	0
GR -> HRM -> PO	0.143	0.142	0.008	17.354	0
GS -> HRM -> PO	0.315	0.316	0.018	17.931	0
GT -> HRM -> PO	0.197	0.198	0.011	18.276	0
GJD -> HRM -> PO -> EP	0.105	0.105	0.008	12.862	0
GR -> HRM -> PO -> EP	0.096	0.096	0.007	13.093	0
GS -> HRM -> PO -> EP	0.211	0.212	0.016	13.246	0
GT -> HRM -> PO -> EP	0.132	0.133	0.01	13.122	0
GJD -> HRM -> EP	-0.069	-0.069	0.011	6.277	0
GR -> HRM -> EP	-0.063	-0.063	0.01	6.333	0
GS -> HRM -> EP	-0.138	-0.138	0.017	7.912	0
GT -> HRM -> EP	-0.087	-0.086	0.011	8.028	0
HRM -> PO -> EP	0.4	0.402	0.026	15.422	0

The results outline the total specified effects of various paths involving GJD, GR, GS, GT, GHR management, PO, and EP. These paths describe how these factors interrelate and collectively influence EP through mediated and direct effects, supported by their respective statistical measures. Firstly, each predictor (GJD, GR, GS, GT) positively influences HRM, enhancing PO. The path coefficients for GJD -> HRM -> PO, GR -> HRM -> PO, GS -> HRM -> PO, and GT -> HRM -> PO are 0.157, 0.143, 0.315, and 0.197 respectively, all with extremely low p-values (0), indicating significant relationships. These findings suggest that improving GJD, GR, GS, and GT practices within an organization can bolster GHR management initiatives, consequently enhancing compensation structures. Further examining the indirect effects on EP through PO, the coefficients for GJD -> GHRM -> PO -> EP, GR -> GHRM -> PO -> EP, GS -> GHRM -> PO -> EP, and GT -> GHRM -> PO -> EP are 0.105, 0.096, 0.211, and 0.132 respectively. These values indicate the extent to which improvements in GHR management and subsequent enhancements in PO contribute to EP. Again, all these paths exhibit high statistical significance (p-values = 0), underscoring their robustness in explaining performance outcomes mediated by compensation strategies. Additionally, direct paths from GHR management to EP are negative, suggesting that while GHR management enhances PO, it also introduces some negative direct impact on EP. The coefficients for GJD -> GHRM -> EP, GR -> GHRM -> EP, GS -> GHRM -> EP, and GT -> GHRM -> EP are -0.069, -0.063, -0.138, and -0.087 respectively, all statistically significant (p-values = 0). This indicates that despite enhancing PO, GHR management practices alone may have direct implications that reduce EP.

Finally, the direct path coefficient from PO to EP is 0.4, highlighting the substantial positive impact of PO on EP. These results illustrate a complex interplay among organizational factors, GHR management practices, PO, and EP. Enhancing job-related factors through effective GHR management can indirectly improve performance via enhanced PO. At the same time, direct GHR management influences EP, and the direct impact of PO on EP also plays a significant role. These findings provide valuable insights for organizations aiming to optimize performance outcomes by strategically managing GHR practices and compensation structures.

Table 11
Total Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values

GJD -> EP	0.036	0.036	0.008	4.804	0
GJD -> HRM	0.262	0.261	0.015	17.376	0
GJD -> PO	0.157	0.156	0.009	16.807	0
GR -> EP	0.033	0.033	0.007	4.779	0
GR -> HRM	0.239	0.238	0.012	19.248	0
GR -> PO	0.143	0.142	0.008	17.354	0
GS -> EP	0.073	0.074	0.018	4.026	0
GS -> HRM	0.527	0.528	0.02	26.623	0
GS -> PO	0.315	0.316	0.018	17.931	0
GT -> EP	0.045	0.046	0.011	3.992	0
GT -> HRM	0.33	0.33	0.011	29.629	0
GT -> PO	0.197	0.198	0.011	18.276	0
HRM -> EP	0.138	0.139	0.032	4.333	0
HRM -> PO	0.598	0.599	0.023	25.555	0
PO -> EP	0.67	0.671	0.029	23.116	0

The table presents the total effects of various EP and PO predictors and their influences on GHR management. Each path coefficient signifies the predictor's direct impact on EP or PO and the intermediate influence on GHR management, supported by their statistical significance, measured through T statistics and P values. Starting with direct effects on EP, GJD has a modest positive impact with a path coefficient of 0.036, indicating that improvements in job design contribute positively to EP. GR similarly shows a small positive effect on EP with a coefficient of 0.033. At the same time, GS and GT have slightly larger impacts of 0.073 and 0.045, respectively, all significant with p-values of 0. Moving to the direct effects on HRM, GJD, GR, GS, and GT show positive relationships with GHR management, with coefficients ranging from 0.262 to 0.527. These values suggest that enhancements in GJD, GR, GT, GS, and green practices within the organization positively influence GHR management strategies.

Regarding direct effects on PO, GJD, GR, GS, and GT all exhibit positive relationships with coefficients ranging from 0.157 to 0.315, indicating that improvements in these factors also contribute positively to PO within the organization. Furthermore, GHR management positively affects EP and PO, with coefficients of 0.138 and 0.598, respectively. It indicates that effective HRM practices enhance EP and significantly influence the quality and effectiveness of pay and benefits. The path coefficient from PO to EP is notably strong at 0.67, indicating a substantial positive impact of PO on EP. These findings highlight a comprehensive framework where organizational factors and effective GHR management practices collectively improve EP and

enhance compensation structures. The statistical significance of all path coefficients underscores the robustness of these relationships, suggesting practical implications for organizations aiming to optimize performance outcomes through strategic management of human resources and compensation strategies.

Discussion and Conclusion

Discussion

The research promotes understanding the connection between GHR management practices and EP and the significance of PO. The findings indicate a positive correlation between GHR management and EP (H_1) and PO (H_2). Additionally, PO is positively linked to EP (H_3). The results also confirm the impact of the PO interaction on the correlation between GHR management and EP (H_4).

This study presents three implications to consider. Firstly, we show that the extent of GHR management can enhance employee quality and performance by fostering ownership. This sheds light on the importance of comprehending how GHR management practices impact employee productivity (Boon et al., 2011). The studies hinted at a clash of interests between business owners and managers regarding GHR management practices targeting employee monitoring and control issues; however, our research reveals that the objectives of these parties are not always conflicting or incompatible (Liu et al., 2017). Our study demonstrates that GHR management strategies can be customized to cultivate a feeling of ownership that includes values and moral standards concerning the company's welfare, leading to an enhancement in EP. This finding intrigues researchers in the field of GHR management, suggesting that a sense of ownership offers new opportunities to anticipate better and understand the relationship between GHR management practices and EP (Liu et al., 2017).

Our research significantly contributes to the psychological literature as it investigates the correlation between GHR management bundle practices, PO, and EP. Within the framework of the AMO (Ability, Motivation, and Opportunity), we define GHR management practices as the primary driver of PO. Our literature review indicates that the GHR management package can develop PO by enhancing organizational control, well-being, and investment. In contrast to Van Dyne and Pierce's (2004) findings, our study reveals a positive association between PO and EP. While Van Dyne and Pierce (2004) observed that the association between PO and EP did not

incorporate democracy into their model, our research presents more favorable results. According to Pierce et al. (1991), PO influences employee behavior, including performance and employment participation, through interactions between employees and organizational owners. Moreover, it is suggested that these factors explain a larger portion of the variance in EP. One potential explanation for this inconsistency is that EP may be restricted by firm structures such as laws, procedures, and sanctions (Liu et al., 2017).

The study presents empirical findings to improve our comprehension of the PO effect previously discussed by O'Driscoll et al. (2006). This area has yet to be thoroughly investigated in prior studies. Additionally, the selection of graphs is a noteworthy aspect. The cross-level analysis is crucial as the implemented GHR management differs from the experienced GHR management. While most of the studies in the literature have focused on a single level, this study explores the design of GHR management packages and their impact on EP. The findings indicate that PO mediates the association among Green GHR management and employee well-being and performance. This study contributes to the scarce research on the influence of organizational processes based on macro and micro GHR management on EP, as discussed in previous works (Aryee et al., 2012).

The functions of GHR management within organizations could be better understood with a more comprehensive and detailed analysis. The current research provides practical insights. PO mediators are crucial for providing actionable feedback to enhance the employees' performance in Pakistan's banking sector (Liu et al., 2017). Despite resource constraints, firms benefit significantly from investing in GHR management. Our findings suggest that the workforce should be viewed as individuals with unique needs, interests, challenges, and vulnerabilities. Additionally, providing support regarding time, goal attainment, recognition, and investment is important. In essence, managers should promote employee ownership by effectively implementing GHR management practices. This approach can lead to a competitive advantage by enhancing competencies, understanding, and quality of life, ultimately improving employees' performance.

Conclusion

The current study contributes to the existing body of literature on the mediating role of PO among GHR management bundle practices and EP. It is the first study to investigate the link

between PO, GHR management bundle practices, and EP. The study also demonstrated that a cognitive approach could enhance understanding of why GHR management practices may influence the individual well-being of employees and their performance. The GHR management practices foster a sense of ownership and motivate employees to lead better lives and work more effectively. This perspective brings the staff member back to the core of GHR management from a psychological standpoint. The bank's HR managers must appoint individuals who know about the green environment and sustainability. The commercial bank's HR manager must recruit and provide training and development to the employees in order to promote green products to make the world a better place to live in.

Limitations and Future Research

Future studies must utilize longitudinal data to establish the association between GHR management practices, PO, and the performance of the employees. Additionally, the correlation and constructs were obtained from the same source, potentially introducing bias. We employed various methodological and statistical measures such as anonymous participants, pilot testing, and Harman testing to address this. However, future research could benefit from obtaining more detailed reports of job performance by department or manager. A GHR management rating from top management (president/vice president) could also be included. While top management is a credible source for GHR management in banks, its effectiveness relies on employee awareness. Hence, both management and employee perspectives should be considered when evaluating GHR management. In the future, researchers should consider gathering data from multiple sources simultaneously. It is worth noting that our analysis was limited to data from the banking sector in Pakistan. Investigating how PO mediates the association between GHR management practices and EP in different industries and cultural settings would be beneficial. In the future, the academicians can conduct the same nature of the study by just changing the type of the data from cross-sectional to longitudinal.

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