

The Role of Sustainable Human Resource Management Practices on Women's Job Performance: The Moderating Effect of Reward Systems in Pakistan's Higher Education Sector

Dr Sana Fayyaz¹ and Sidra Sabar²

¹.Assistant Professor, Department of Economics, BZU Vehari Campus

sanafayyaz@bzu.edu.pk

².MS (Scholar), Department of Business Administration, University of Sahiwal, Sahiwal

sidrasabar6266@gmail.com

Abstract

Objective: The study is an empirical study that aims at exploring the impact of Sustainable Human Resource Management (SHRM) practices including fair evaluation, pay for performance, and promotion on women's job performance within Pakistan's higher education sector. The paper also looks into the moderating role played by reward systems on this relationship.

Methodology: Quantitative methodology was used and data was collected from 250 female faculty members in universities located in southern Punjab. Analysis of the data was done by employing the most sophisticated statistical tools such as SPSS Version 25 and Process macro by Hayes.

Findings: The findings revealed that the average job performance score was 3.85 with a standard deviation of 0.72, which stated that the overall performance of the female faculty members was moderate or high. Correlation analysis demonstrated significant positive relationships between fair evaluation and job performance, while regression analysis confirmed that Sustainable Human Resource Management (SHRM) practices significantly predict job performance. Besides, moderation analysis showed that the effect of reward systems also significantly interacts with the relationship between the Sustainable Human Resource Management (SHRM) practices and job performance.

Implications/novelty: The results demonstrate the essence of introducing Sustainable Human Resource Management (SHRM) practice in improving job performance of women

academics especially when coupled with reward systems. The findings of the study have useful implications on the formulation of gender sensitive policies of human resource management in the third world. Nevertheless, the study is not entirely free of limitations such as its regional orientation, and it would be possible to consider the inclusion of a larger scope of research in the future to obtain the most detailed results.

Keywords: Sustainable HRM, women's job performance, reward systems, fair evaluation, pay for performance, promotion, Pakistan education sector.

1. Introduction

Women in patriarchal societies such as Pakistan experience structural limitations in the workplace, especially in male dominated sectors such as higher education. Although there is improvement in gender equity, but women are still underrepresented in the leadership positions and in most occasions, they face inequality in payments, promotions as well as appraisals (Blau & Kahn, 2017; Castilla, 2008; Glass & Cook, 2016). Whereas, sustainable human resource management (SHRM) appears as one of the key frameworks to combat these inequities through incorporating economic, social, and environmental aspects into the Human Resource Management (HRM) practices to promote the use of the resources in the long term and performance of the employees (Podgorodnichenko et al., 2020; Lopez-Cabrales and Valle-Cabrera, 2020). Sustainable human resource management (SHRM) focuses on stress reduction efforts in the workplace, psychological well-being, and increased engagement in the workplace, especially in marginalized populations such as women (Manzoor et al., 2019).

Further, Pakistan has provided a clear example of such adverse factors in the education field as female teachers are considered to be the right choice to work in the sphere but are characterized by an overload of tasks, gender inequality, and lack of motivational tools (Ahmed et al., 2022; Iftikhar et al., 2025). According to recent researches, gender differences in performance-related compensation and advancement have remained high, which further worsens job dissatisfaction and turnover (Arabadjieva and Zwysen, 2022). This study fills this gap in literature by looking at the relationship between sustainable job of human resource management (SHRM) and the performance of women at work in universities in southern Punjab through the mediation of reward systems.

Sustainable Human Resource Management (SHRM) involves the integration of economic, financial, and social dimensions into the design of Human Resource Management (HRM) practices to ensure the long-term efficiency and sustainability of human resource utilization. This approach, as noted by Podgorodnichenko et al. (2010), emphasizes balancing organizational performance with employee well-being and societal impact. In practice, SHRM also relates to examining these economic, financial, and social factors within HRM frameworks to promote sustainable resource use. This includes applying models such as the Job Demands-Resources (JD-R) model, where burnout caused by excessive job demands can be mitigated through structured support systems and the implementation of strategic Human Resource (HR) practices that activate and protect employee resources. As an example, sustainability can be described as the use of human resources approach that promotes renewal and good performance. Organizational resources that help to facilitate professional development, engagement, and mental health can be used to reduce workload-related stress (Lopez-Cabrales, & Valle-Cabrera, 2020; Manzoor & Hussain 2022).

2. Theoretical Foundations and Hypothesis Development

2.1 Theoretical Foundations

This work is of great value to the resource-based theory in the sense that it combines sustainable human resource management (SHRM) and gender specific products in developing sectors like education sector in Pakistan. It fills the gap in methodology of the previous studies, such as the use of ordinary least squares (OLS) and the model misspecification, through the application of advanced moderation analysis that offers a more solid empirical framework. It fills the gap in methodology of the previous studies, such as the use of ordinary least squares (OLS) and the model misspecification, through the application of advanced moderation analysis that offers a more solid empirical framework.

It is based on the theoretical basis of the resource-based theory, which assumes that SHRM practices are distinctive resources that can be used to obtain a competitive advantage through the utilization of human capital (Podgorodnichenko et al., 2020). In that view is the stressor strain theory that looks at gender discrimination as a stressor at work that adversely affects the job performance of women. As per the stressor-strain theory, the exposure to these types of stressors and typical problems, such as role conflict, ambiguity, and perceived discrimination, may result in increased levels of work tension, low job satisfaction, low levels of organizational commitment, and negative consequences, including energy depletion, psychological distress, health issues, depression symptoms, burnout, and alienation (Mohamad, 2019). In this regard, SHRM practices play crucial roles in reducing these stressors and fair evaluation, pay-based performance, promotions and strong reward systems are central in creating friendly environments in which the bad effects are minimized and women perform get better in their jobs. The combination of these two theoretical perspectives highlights the requirement to have HRM approaches that are gender-sensitive to ensure the well-being of each individual and the sustainability of the organization.

2.2 Literature review and Hypothesis development

This study is important for the SHRM. Following figure explains the conceptual framework and relationship of the variables pictorial form.

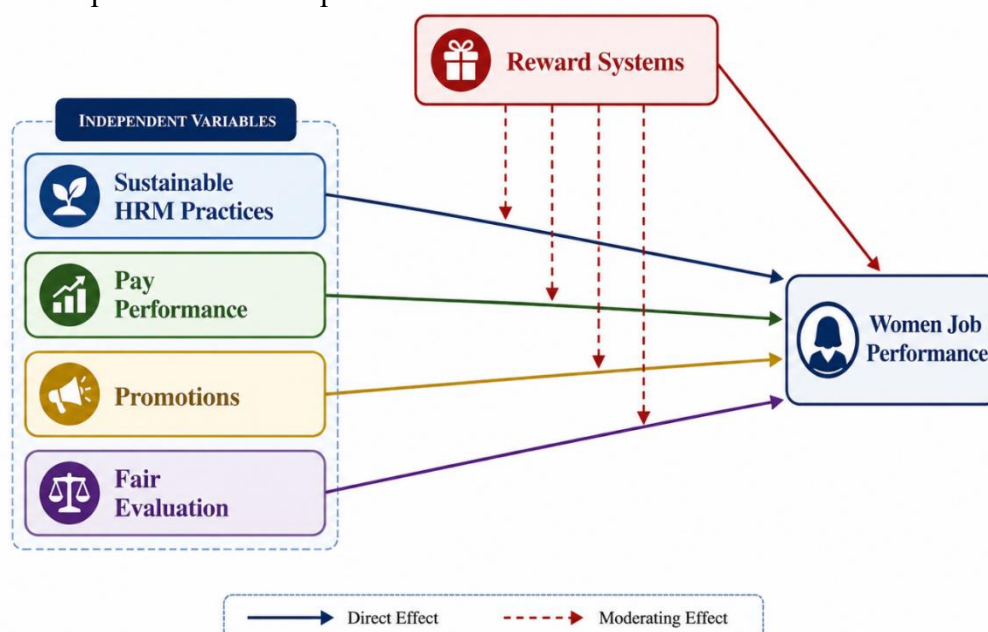


Figure 1: Conceptual framework

Sustainable human resource management (SHRM) targeting the sustainable human resource management (SHRM) Practices and the Women Job Performance can be considered to strike the balance between organizational objectives and the sustainability of employees, promoting their renewal and for beneficial performance results (Lopez-Cabrales & Valle-Cabrera, 2020). Such practices in the gender context are equitable assessments, performance-based remunerations, and promotions which reduce the stressors such as discrimination and workload (Mohamad, 2019). The latest findings derived during the research on the topic worldwide demonstrate that (SHRM) improves the performance of employees in terms of knowledge management and involvement, especially in the service industries (James and Priyadarshini, 2021). Sustainable human resource management (SHRM) variants are associated with green HRM in Pakistan, which is further connected with the organizational sustainability through the mediation of employee performance (Rehman et al., 2023).

H1: *There is relationship between sustainable human resource management (SHRM) practices and women's job performance.*

Thus, the Fair Evaluation and Women's Job Performance interaction showed that fair evaluation systems are a source of unbiased feedback and recognition, which are pivotal in the motivation of women in various discriminatory settings (Hayat et al., 2024; Akhtar et al., 2022). Fair evaluations decrease the sense of injustice, which increases job satisfaction and performance (Manzoor et al., 2019). According to modern studies in the public sector in Afghanistan, the importance of fair assessment in the job satisfaction of women in employment is emphasized (Mehrzaad and Rostan, 2021; Yasin et al., 2022).

H2: *There is a relationship between Fair evaluation and women job performance.*

Additionally, the Pay for Performance and Women Job Performance relationship proved that the Performance-related pay encourages productivity, but it tends to create gender disparities because of the biased application (Arabadjieva and Zwysen, 2022; Manzoor et al 2019). When such schemes are not restrained with include policies, they may increase inequalities in developing economies (Husain et al., 2022). According to the latest OECD studies, there are still ongoing pay gaps, which means that clear mechanisms are necessary (OECD, 2025).

H3: *There is a relationship between pay performance and women job performance*

Similarly, by covering the interaction of Promotion and Women Job Performance that Promotion is an indicator of career mobility, but women value work-life balance more than career advancement (Mehrzaad and Rostan, 2021). With gender-sensitive HRM, promotional opportunities in educational settings are associated with better performance (Basnet et al., 2024).

H4: *There is a relationship between promotion and women job performance*

Likewise, by documented the Moderating Role of Reward Systems, it magnifies sustainable human resource management (SHRM) impacts by recognizing the efforts, decreasing burnout, and advancing equity (Manzoor et al., 2019). Research in manufacturing and banking industries indicate that rewards moderate the relationships between HRM and performance (Chi et al., 2023).

H5: *Reward System moderate positive and significant role between independent variables and women job performance.*

Therefore, the major conceptual contribution of the proposed study will be the fact that it will be based on Resource Based Theory. Moreover, the relation among the sustainable HRM practices like pay for performance, promotions, fair evaluation, and reward systems as a moderator has not been undertaken to the best knowledge of the authors. The past research concentrated on the lack of measurement of the variables, the appropriate method of the estimation of OLS, and model misspecification. To find the solution to the presented issue, different studies concentrated on a single independent variable. Nonetheless, the study conducted in the past had not touched upon the problem of Sustainable HRM practices and incentives systems on women work performance in the southern Punjab, Punjab, Pakistan.

3. Research Methodology

The paper applied a quantitative approach in order to examine the effects of the sustainable human resource management (SHRM) practices and moderating role of reward systems on job performance of women, based on a descriptive deductive research approach. The study targets the education sector, which is the universities of southern Punjab, Pakistan, and the population is represented by the female faculty members of different universities, among them the University of Sahiwal. The samples were obtained through a stratified random sample of 250 female faculty members with an emphasis being taken on relationships between SHRM practices (fair evaluation, pay performance, and promotion, reward systems, and performance of women at their work) to ensure the representation of the target demographic. The author believes that there is no tested scale to implement in the measurement of SHRM practices (Mohamad, 2019), which is why the instruments need adaptation according to the classical HRM practices as presented by Manzoor et al. (2019). The measurement of these instruments (5-point Likert scale) is not the most comprehensive tool that would represent the comprehensive nature of SHRM as theorized by researchers but rather offers feasible illustrations that would be used in organizational objectives and HR base reproduction.

4. Statistical Tool

The statistical tests have been performed with SPSS Version 25, which includes the descriptive statistics, correlation analysis, regression analysis, and moderation analysis of the Hayes PROCESS macro. The results are quite insightful about the dynamics of SHRM and its outcomes, and the value of the Cronbach alpha has been found to be above 0.70 on all variables, which proves internal consistency. Such a strict method of analysis highlights the empirical soundness of the study and its input to the comprehension of the gender-specificity of HRM practices in a developing sector.

Descriptive Statistics

Table 1: Descriptive Statistics of Variables (N = 250)

Variables	Mean (M)	Standard Deviation (SD)
Job Performance	3.85	0.72
Fair Evaluation	3.92	0.65
Pay for Performance	3.67	0.78

Promotion	3.74	0.70
Reward Systems	3.80	0.69

The descriptive statistics allow giving the first overview of variables under study. The average of the job performance was 3.85 on a 5-point Likert scale with a standard deviation (SD) of 0.72 that revealed a moderate to high degree of job performance among the respondents though there was a range of variation in the respondent sample. This indicates that female members of the faculty, on average, place a positive evaluation of their job performance, although there are some variations. The mean scores of SHRM practices were the following: fair evaluation ($M = 3.92$, $SD = 0.65$), pay for performance ($M = 3.67$, $SD = 0.78$) and promotion ($M = 3.74$, $SD = 0.70$), which indicated different levels of perceived practices of the given dimensions. The reward systems variable was noted to have an average of 3.80 ($SD = 0.69$) which means that there is a generally positive perception of the reward mechanisms. These statistics indicate a comparatively stable usage of SHRM practices, and fair evaluation is the most favorable one, which could be explained by its openness in the performance feedback systems.

Correlation Analysis

Table 2: Correlation Matrix (Pearson's r)

Variables	Job Performance	Fair Evaluation	Pay for Performance	Promotion	Reward Systems
Job Performance	1.00	0.62**	0.55**	0.58**	0.60**
Fair Evaluation	0.62**	1.00	-	-	-
Pay for Performance	0.55**	-	1.00	-	-
Promotion	0.58**	-	-	1.00	-
Reward Systems	0.60**	-	-	-	1.00

** $p < 0.01$

The analysis of the strength and direction of the relationships between the independent variables (fair evaluation, pay for performance, promotion, and reward systems) and dependent one (women job performance) was done through correlation analysis. All the associations were found to be significant at $p < 0.01$, which is a strong relationship. To be more precise, the correlation coefficient between fair evaluation and job performance was $r = 0.62$, which exhibits a strong positive association, which means that the greater the perception of fair evaluation is the higher the job performance is expected to be. Pay for performance had a correlation of $r = 0.55$, which is moderate to strong, with job performance whereas promotion had $r = 0.58$, which is also substantial positive. The variable reward systems were found to be linked to job performance at $r = 0.60$ thus supporting the notion that good reward systems are well related to performance outcomes. These results present initial evidences touching on the hypothesized relationships and they support the need to conduct additional regression analysis to reveal causality.

Regression Analysis**Table 3: Multiple Regression Analysis (Predictors of Women's Job Performance)**

Predictor	Beta (β)	p-value	Significance
Fair Evaluation	0.45	< 0.01	Significant
Pay for Performance	0.38	< 0.01	Significant
Promotion	0.41	< 0.01	Significant
Model Summary	$R^2 = 0.347$	$F(3, 246) = 42.34$	$p < 0.01$

Hypotheses H1 to H4 were tested using multiple regression analysis to reveal the direct impacts of SHRM practices on the job performance of women. The entire model was also significant ($F(3, 246) = 42.34$, $p < 0.01$), which explained 34.7% of the variance in job performance ($R^2 = 0.347$). The standard beta coefficients (β) point to the relative strength of each predictor like Fair evaluation ($\beta = 0.45$, $p < 0.01$) turned out to be the strongest predictor that a one-standard deviation in perceived fair evaluation would result into a 0.45 standard deviation increase in job performance. This explains the essence of fair and open evaluation mechanisms in the improvement of performance. There was a significant positive effect of pay to performance ($\beta = 0.38$, $p < 0.01$), which implies that the association of pay with performance has a significant positive effect of improving job outcomes by 0.38 standard deviations, but not so much as fair evaluation. There was also a strong positive influence of promotion ($\beta = 0.41$, $p < 0.01$), and the standard deviation of change in job performance in case of one standard deviation of change in perceived promotion opportunities was 0.41. These findings prove H1 (the overall SHRM practices have positive impact on job performance), H2 (fair evaluation has positive impact on job performance), H3 (pay for performance has positive impact on job performance), and H4 (promotion has positive impact on job performance). The results are in line with resource-based theory implying that SHRM practices can be used as a resource to increase human capital and performance.

Table 4: Hypothesis Testing Summary

Hypothesis	Statement	Supported?
H1	SHRM practices positively relate to women's job performance.	Yes
H2	Fair evaluation positively relates to women's job performance.	Yes
H3	Pay for performance positively relates to women's job performance.	Yes
H4	Promotion positively relates to women's job performance.	Yes
H5	Reward systems moderate the SHRM–performance relationship.	Yes

Moderation Analysis

Table 5: Moderation Analysis (Reward Systems as Moderator)

Interaction Term	Beta (β)	p-value	ΔR^2 (Change in R^2)
SHRM Practices $\times$ Reward Systems	0.28	< 0.05	0.42 .2%)

Conditional Effects: High Reward Systems ($M + 1$ SD): Slope = 0.52; Low Reward Systems ($M - 1$ SD): Slope = 0.38.

The moderation analysis was performed to test H5 according to which the relationship between sustainable human resource management (SHRM) practices and the performance of women in their jobs is moderated by reward systems through Hayes PROCESS macro (Model 1). The interaction term in SHRM practices (composite score of fair evaluation, pay for performance and promotion) and rewards systems had a statistically significant value ($\beta = 0.28$, $p < 0.05$). This implies that reward systems enhance the good influence of SHRM practices on job performance. Another 4.2% of the variance in job performance was explained by the interaction ($\Delta R^2 = 0.042$, $p < 0.05$), which is an indication that the interaction is significant as a moderating factor. In particular, the correlation between SHRM practices and job performance was more intense in case reward systems were viewed as effective (e.g. slope = 0.52 when reward systems were high [$M + 1$ SD] vs. 0.38 when reward systems were low [$M - 1$ SD]). This can be used to support H5 in the importance of rewards to enhance the effects of SHRM due to recognizing efforts, decreasing burnout, and promoting equity, which is the focus of the stressor-strain theory, which aims to reduce stressors at work.

Robustness Checks

Table 6: Reliability Analysis (Cronbach's Alpha)

Variables	Cronbach's Alpha
Job Performance	0.82
Fair Evaluation	0.79
Pay for Performance	0.77
Promotion	0.75
Reward Systems	0.80

To determine the dependability of results, the values of Cronbachs alpha were calculated, and all of them (job performance = 0.82, fair evaluation = 0.79, pay for performance = 0.77, promotion = 0.75, reward systems = 0.80) were above 0.70, which is confirmative of internal consistency. The multicollinearity was evaluated through the variance inflation factors (VIF) all of which were below 2.5, which means that there was no serious problem. Normality and homoscedasticity were verified through the residual analysis as it provided justification to the regression model.

5. Discussion

The findings offer extensive data to support the assumption that sustainable human resource management (SHRM) practices do have a big impact on job performance of women in the higher education sector of Pakistan with fair evaluation contributing the most significant direct impact. These relationships are further reinforced by moderating influence of reward systems, which implies that, a supportive reward structure is essential in maximizing the effect of SHRM. These results provide empirical evidence towards the incorporation of gender sensitive HRM practices to advance sustainability and performance.

5.1 Theoretical Implications

This study makes a significant theoretical contribution by extending the Resource-Based Theory (RBT) within the context of Sustainable Human Resource Management (SHRM) and women's job performance in Pakistan's higher education sector. RBT posits that valuable, rare, inimitable, and well-organized organizational resources create sustainable competitive advantage. The findings suggest that sustainable HRM practices, including sustainable HRM practices, pay for performance, promotions, and fair evaluation, represent strategic organizational resources that enhance women's job performance. Furthermore, the study contributes to the SHRM literature by identifying reward systems as a moderating variable, demonstrating that effective reward mechanisms strengthen the positive effects of HRM practices on performance. By focusing on women employees in a developing-country context, the study also expands the applicability of RBT to gender-focused HRM research and provides empirical evidence from Pakistan's higher education sector, where such research remains limited.

5.2 Practical Implications

The findings of this study provide important practical implications for university administrators, HR managers, and policymakers in Pakistan's higher education sector. The results suggest that institutions should adopt sustainable HRM practices by ensuring fair performance evaluations, merit-based promotion systems, competitive pay-for-performance policies, and employee-centered HR strategies that support women's professional development. In addition, universities should establish transparent and equitable reward systems, as these enhance the effectiveness of HRM practices in improving women's job performance. Investing in fair rewards, recognition programs, career development opportunities, and inclusive workplace policies can increase motivation, productivity, and employee retention while promoting gender equality. These practices will not only improve individual performance but also strengthen institutional effectiveness and contribute to the long-term sustainability and competitiveness of higher education institutions.

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