

The moderating effect of external fit in the relationship between HPWS and financial performance in public enterprises in Ethiopia

O efeito moderador do ajuste externo na relação entre HPWS e desempenho financeiro em empresas públicas na Etiópia

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Abstract: *This study examined the direct moderating effect of external fit in the relationship among the High Performance Work Systems (HPWS), Human Resource (HR) outcome, operational outcome, and financial performance of public enterprises in Ethiopia. It also assessed the moderated indirect relationships between the HPWS and financial performance of the enterprises via the HR outcome and operational outcome mediators. Contingency theory was used as an analytical framework as the theory examines the impact of vertical integration between HPWS and competitive business strategy on organizational performance. The research is a cross-sectional quantitative study. The organization was the unit of analysis of the study while the units of observation were top, middle, and lower level managers. The study covered nine public enterprises, and collected data from 480 managers by using validated structured questionnaire. Structural Equation Modeling (SEM) technique was used to perform the data analysis of the study. The data were analyzed by using Analysis of Moment Structures (AMOS) 26 and Statistical Package for the Social Sciences (SPSS) 27 software. The results of the research show that the direct relationship between HPWS, HR outcome, operational outcome, and financial performance were not moderated by external fit. External fit did not also moderate the indirect relationship between HPWS and financial performance. As the research used cross-sectional data, future research might use a longitudinal research design to collect data on both HPWS practices and organizational outcome constructs to conclusively understand the nature of relationship and causality between HPWS and financial performance. The study recommends the public enterprises in Ethiopia to focus more on*

strengthening the main effect of the HPWS than trying to ensure the existence of alignment between the HPWS practices with the competitive strategies of the public enterprises.

Key words: HPWS, SHRM, HR outcome, Operational outcome, Financial performance, External fit, Public enterprise, Ethiopia.

Resumo: Este estudo examinou o efeito moderador direto do ajuste externo na relação entre os sistemas de trabalho de alto desempenho (HPWS), resultados de Recursos Humanos (RH), resultados operacionais e desempenho financeiro de empresas públicas na Etiópia. Também avaliou as relações indiretas moderadas entre o HPWS e o desempenho financeiro das empresas por meio dos mediadores de resultados de RH e resultados operacionais. A teoria da contingência foi usada como uma estrutura analítica, pois a teoria examina o impacto da integração vertical entre o HPWS e a estratégia de negócios competitiva no desempenho organizacional. A pesquisa é um estudo quantitativo transversal. A organização foi a unidade de análise do estudo, enquanto as unidades de observação foram gerentes de nível superior, médio e inferior. O estudo abrangeu nove empresas públicas e coletou dados de 480 gerentes usando questionário estruturado validado. A técnica de modelagem de equações estruturais (SEM) foi usada para realizar a análise de dados do estudo. Os dados foram analisados usando o software Analysis of Moment Structures (AMOS) 26 e o Statistical Package for the Social Sciences (SPSS) 27. Os resultados da pesquisa mostram que a relação direta entre HPWS, resultados de RH, resultados operacionais e desempenho financeiro não foi moderada pelo ajuste externo. O ajuste externo também não moderou a relação indireta entre HPWS e desempenho financeiro. Como a pesquisa utilizou dados transversais, pesquisas futuras podem usar um delineamento longitudinal para coletar dados sobre práticas de HPWS e construtos de resultados organizacionais para compreender conclusivamente a natureza da relação e causalidade entre HPWS e desempenho financeiro. O estudo recomenda que as empresas públicas na Etiópia se concentrem mais em fortalecer o efeito principal do HPWS do que em tentar garantir a existência de alinhamento entre as práticas de HPWS e as estratégias competitivas das empresas públicas.

Palavras-Chave: HPWS, SHRM, Resultado de RH, Resultado operacional, Desempenho financeiro, Ajuste externo, Empresa pública, Etiópia.

1. Introduction

A rising body of theoretical and empirical studies argue that HPWS such as selective hiring, high and performance-based compensation, employee performance appraisal systems, decentralization of decision-making, and extensive training can enhance employees job satisfaction, commitment, empowerment, and retention while discouraging nonperformers to stay within the organization (Boon et al., 2019; Boxall, 2012; Dessler, 2013; Huselid, 1995; Pfeffer, 1998; Posthuma et al., 2013; Takeuchi et al., 2007). By enhancing workforce skills, motivation, commitment, and productivity, HPWS improves organization performance (Posthuma et al., 2013). This recognition of HR as a source of competitive advantage has resulted in the growth of strategic human resource management (SHRM) field (Wright et al., 1999).

SHRM focuses on rationalizing the existence of HPWS by identifying its added value for organization performance (Paauwe & Boon, 2019). It has three main objectives. First, it assures the consideration of HPWS issues while formulating business strategies. Second, it identifies HPWS goals and action plans that are consistent with an organization's business strategies. Finally, it works in close collaboration with line managers to make sure that action plans are being implemented properly (Dyer & Holder, 1987). The central idea is that SHRM needs the appropriate

external fit between an organization's HPWS and its overall strategy; HPWS practices will have a significant positive impact on an organization's profitability if they are strategically aligned with the organization's mission (Ivancevich, 2010). A properly aligned HR strategy results in an enhanced fit between an organization's strategy and its HPWS policies. It will be difficult for an organization to attain its goals if the HPWS practices are unaligned or misaligned with the organization's priority objectives (Ivancevich, 2010).

The contingency theory of HPWS examines the relationship between HPWS and strategic management by exploring the existence of vertical integration between an organization's HPWS policies and practices, and its competitive business strategy (Golding, 2004; Knies et al., 2018). It assumes that the effect of HPWS on performance is contingent upon the strategic posture of the organization (Youndt et al., 1996). The justification being that if there is proper link between an organization's competitive strategy and its HPWS policy, a superior organization performance will result (Golding, 2004). It argues that organizations that have HPWS that is meshed with their business strategy perform better than those that do not have; they are capable of creating an environment where workers behavior is consistent with the strategy of the organization (Delery & Doty, 1996).

According to the contingency perspective, the impact of HPWS on performance is conditioned by organization strategy (Youndt et al., 1996); therefore, the view necessitates HR researchers to demonstrate how HPWS interacts with strategy to impact organization performance (Delery & Doty, 1996). As compared to universalistic arguments, the contingency perspective is complex as it focuses on interactions than a mere simple linear associations (Delery & Doty, 1996). Contingency theory contradicts the universalistic theory as it assumes that HPWS should be aligned with the strategy and context of an organization to produce substantial organizational performance.

Using configurational theory as an analytical framework, a previous work by the authors examined if performance of public enterprises is contingent on the degree of internal fit among HPWS practices (Reda & Eshetu, 2025). This study, therefore, adds to the existing literature by testing if the alignment between HPWS and an organization's competitive strategy are vital dimensions for explaining the nexus between HPWS and organizational performance in the context of public enterprises in Ethiopia using the contingency theory as a framework; it checked if the main effect of HPWS is moderated by external fit with the business strategy of the study organizations to generate a positive effect on HR outcome, operational outcome, and financial performance.

2. Theoretical background and hypotheses development

This section explains the state of HPWS in the public sector and offers the reasons for studying HPWS in the public sector. In addition, it examines the difference between the public and private sectors regarding the use of HPWS practices. Moreover, the part discusses the relationship among HPWS, HR outcome, operational outcome, and financial performance. Furthermore, it develops the hypotheses of the study after demonstrating the association between HPWS, external fit, and organizational performance (see Figure 1).

2.1 HPWS in the Public Sector

The central attention of HPWS in the public sector is the effective management of those people who are in the employee-employer relationship with the government. Recruiting, selecting, developing, rewarding, maintaining, and terminating employment relationship contract, are the main functions of HPWS in the public sector (Brown, 2004; Burke et al., 2013). It also involves properly handling legal issues that regulate the employer-employee relationship, and is one of the most important factors that determine change in the public sector (Brown, 2004; Burke et al., 2013).

Although public sector institutions perform the basic functions of HPWS such as acquisition, training and development, performance appraisal, and compensation, HPWS in the public sector has additional complexity as compared to the private sector due to its public interest dimension thereby limiting its capacity of becoming a source of competitive advantage to the organization (Brown, 2004).

Although public sector changes have affected the employees and the condition of their work environment, the attention given to HPWS in the public sector has been very limited. In addition, the coverage given to the issue of HPWS in the public sector on relevant books and scholarly articles has only been superficial (Brown, 2004).

2.2 HPWS practices in public and Private organizations

HPWS in the public sector has been more inclined to the use of soft HPWS practices such as welfare management, employee development, equal opportunities, and career management. The public sector organizations tend to focus on protecting the well-being of their employees as a result they tend to focus on issues such as employee health, welfare, and safety. In addition, payment is not contingent upon employee performance; that is, employees who are doing similar tasks are paid equally. Public sector employees are also provided with job security and lifelong employment opportunity. Trade unions also play a huge role in determining compensation and working hours (Knies et al., 2022). In contrast, the HPWS practices of the private sector are oriented towards hard HPWS practices such as performance management, and compensation and benefits (Knies et al, 2022).

By surveying over 900 managers who were working in public and private sector organizations, Boyne, Jenkins, and Poole (1999) found that, as compared to the private sector, public sector organizations focus on the provision of job security, and equal payment for employees who do equal work. Public sector organizations also offer their employees with better opportunities of participation. Finally, the public sector has better workforce welfare policies. In contrast, private organizations have better reward practices (Boyne et al, 1999). In a similar study, Kalleberg et al. (2006), also found out that public sector organizations give their employees the chance to participate in the decision-making process. On the other hand, the private sector has compensation system that is contingent upon the performance of the employee (Kalleberg et al, 2006).

Based on a total of 5271 organizations in 8 European countries, Knies et al (2022) also studied whether the traditional difference between the private and public sector HPWS practices are still relevant in today's contemporary organizations. The authors found out that the public sector is distinct from the private sector based only on its equal opportunity HPWS practices; in contrast, performance management, and compensation and benefits tend to be used more in the private sector. On the other hand, career management, development, and welfare management HPWS practices are being used almost equally by both sectors. Finally, the authors discovered that the distinction between the public and private sectors in terms of the usage of HPWS practices is decreasing over time.

2.3 Why study HPWS in the Public Sector?

Public organizations are vital for the functioning of the modern society and are highly expected to provide quality service in a timely manner; the provision of quality and timely service, in turn, is highly dependent upon the competence and motivation of public sector employees (Burke et al, 2013). HPWS practices such as hiring, development, performance management, and career development have an effect on public sector workforce effectiveness; therefore, strategies for managing public sector employees have the ability to address the demands of the society (Burke et al, 2013).

The HPWS practices of public sector organizations needs special consideration due to the following reasons: (1) literatures in HPWS have failed to provide enough attention to the public sector; (2) the high significance of goods and services delivered by public sector organizations to the society, and the importance of public employees in providing these goods and services; (3) the enormous amount of government investment in the public sector, and the desire of the government to make the most out of it; and (4) the multitude of employee-related problems faced by the organizations (Burke et al, 2013). All these have implications on the amount and complexity of work expected from the public sector organizations and the degree to which the organizations meet these expectations mainly depends on the quality of HPWS practices they have to enhance the capacity of their HRs (Burke et al, 2013).

2.4 HPWS, HR outcome, operational outcome, and financial performance

According to Dyer and Reeves (1995), the impacts of HPWS on performance are divided into four categories of outcomes. These are HR outcome, operational outcome, financial performance, and market-based outcomes. HR outcome is concerned with the effects of the HPWS practices on employee's attitudes and behaviors such as job satisfaction, commitment, empowerment, turnover, and absenteeism. Operational outcome measures the influence of HPWS on productivity, customer satisfaction, quality, and its market performance. Financial performance focuses on an organizations revenues, expenses, and profitability. Finally, how the financial markets value an organization through stock price or alternatives of it are considered as the market-based outcomes of an organization.

Various studies explored the impact of HPWS on both intermediate outcomes such as HR outcome and operational outcome, and distant outcomes such as financial performance. The seminal work of Huselid (1995) found out a significant association between HPWS and turnover, profit, and market value in USA; by surveying 968 organizations, he discovered that a 1 standard deviation increase in the use of HPWS reduced turnover by 7.05 percent, enhanced the amount of sales by \$27,044, and improved organization profits and market value by \$3,814 and \$18,641 respectively. Similarly, Guthrie (2001) found that HPWS practices were significantly associated with turnover and profitability of organizations in New Zealand. By taking data from 74 small and medium enterprises (SMEs), Zheng (2001) examined the nexus between HPWS and SME performance in China. The finding of the study shows that SMEs with HPWS that focuses on incentive and compensation management were able to secure better behavioral outcomes; on the other hand, enterprises that focus on free market selection and performance management obtain better financial performance.

Richard and Johnson (2001) also studied the impact of HPWS effectiveness on organizational performance in the banking industry. The authors conducted a survey of banks that are located in California and Kentucky and found out that HPWS effectiveness decreases turnover and enhance market performance. They also investigated the moderating role of capital intensity in the relationship between HPWS, productivity, and return on equity.

2.5 HPWS, external fit, and organizational performance

HPWS contributes for superior organizational performance when there is fit between the HPWS practices of the organization and its strategy (Han et al., 2019; Posthuma et al., 2013). Organizations that are successful in creating better alignment between strategy and HPWS perform better than their competitors (Baird & Meshoulam, 1988). HRM scholars also argue that external fit between HPWS practices and business strategy leads to better organizational performance (Fey, Björkman, & Pavlovskaya, 2000). External fit refers that HR system becomes effective when the HPWS of an organization is embedded with its business strategy (MacDuffie, 1995). The fit exists when there is alignment between an organizations' HPWS and its business strategy (Baird &

Meshoulam, 1988). There is a popular notion that organizations with HPWS that are consistent with their organizational strategy have better performance than those with inconsistent HPWS-strategy relationship (Miles & Snow, 1984; Schuler & Jackson, 1987). Advocates of the ‘strategic fit’ view argue that enhanced organizational performance is possible when there is alignment between HPWS and organization strategy (Schuler & Jackson, 1987). However, the empirical studies that support the argument are very limited (Lengnick-Hall & Lengnick-Hall, 1988; Dyer & Reeves, 1995). Despite the logicity of the argument, there is limited support for significant positive contribution of strategic fit on organizational performance (Becker & Huselid, 1998). The studies have not been able to find enough evidence that shows the effect of HPWS is dependent on business strategy (Hoque, 1999). The limited support for the positive effect of strategic fit on organizational performance is due to the complexity of identifying what comprises good fit (Becker & Gerhart, 1996). The strategic configuration of HPWS practices may be idiosyncratic and intricate (Barney, 1991).

Although majority of the research works that had been conducted in the past were generally not able to identify enough evidence supporting a significant positive contribution of strategic fit on organizational performance, there are some studies that have found the external fit between HPWS and business strategy leading to better organization performance. For example, Huselid and Becker (1997) surveyed 702 organizations in the US to investigate the effect of HPWS, effectiveness of the system, and its alignment with organization business strategy on shareholder wealth. The authors discovered that an increase in one standard deviation (SD) in the study factors resulted in a \$42,000 per workforce improvement in market value. Hoque (1999) also studied the nexus between HPWS and performance. By surveying more than 200 hotels in the UK, the author found out that the business strategy of the hotels determines the relationship between HPWS and performance; hotels with HPWS that is aligned with quality-focused strategy and a mutually reinforcing HPWS practices have better performance than those with cost-cutting business strategy.

The article by Khatri (1999) discusses the state of HPWS in Singapore. The study found out that the type of organizational strategy dictates the link between HPWS and strategy; the position of HPWS and its relationship with parts of the organization is influenced by organizational culture; the position of HPWS and its alignment with organization strategy is affected by the competency level of HR managers; the absence or presence of HR strategy has an impact on the vertical and horizontal alignment of HPWS practices; and all these factors combined have an effect on the HR outsourcing activities of an organization. Similarly, by surveying around 200 organizations from main industries in Singapore, Khatri (2000) discovered that the strategy of an organization has an impact on its HPWS practices. In addition, the alignment between HPWS practices and competitive strategy explains the majority of variation in performance.

By analyzing data from 315 organizations in Taiwan, Huang (2001) found out that different combinations of HPWS and business strategy have differential impact on performance. Similarly, Chang and Huang (2005) surveyed 235 organizations to examine the relationship between HPWS and organization performance in Taiwan. The authors have found that the interaction between strategy and HPWS have a significant positive effect on the performance of Taiwanese organizations. Björkman and Xiucheng (2002) also found that there is a positive relationship between HPWS and performance of western organizations in China; the degree of fit between HPWS practices and organization strategy has also been associated positively with the performance of the multinational corporations.

Although the findings of previous studies are inconclusive, based upon the contingency theory, this study expects that:

Hypothesis 1: External fit between the public enterprises HPWS practices with their competitive strategy positively moderates the relationship between HPWS and HR outcome in public enterprises in Ethiopia.

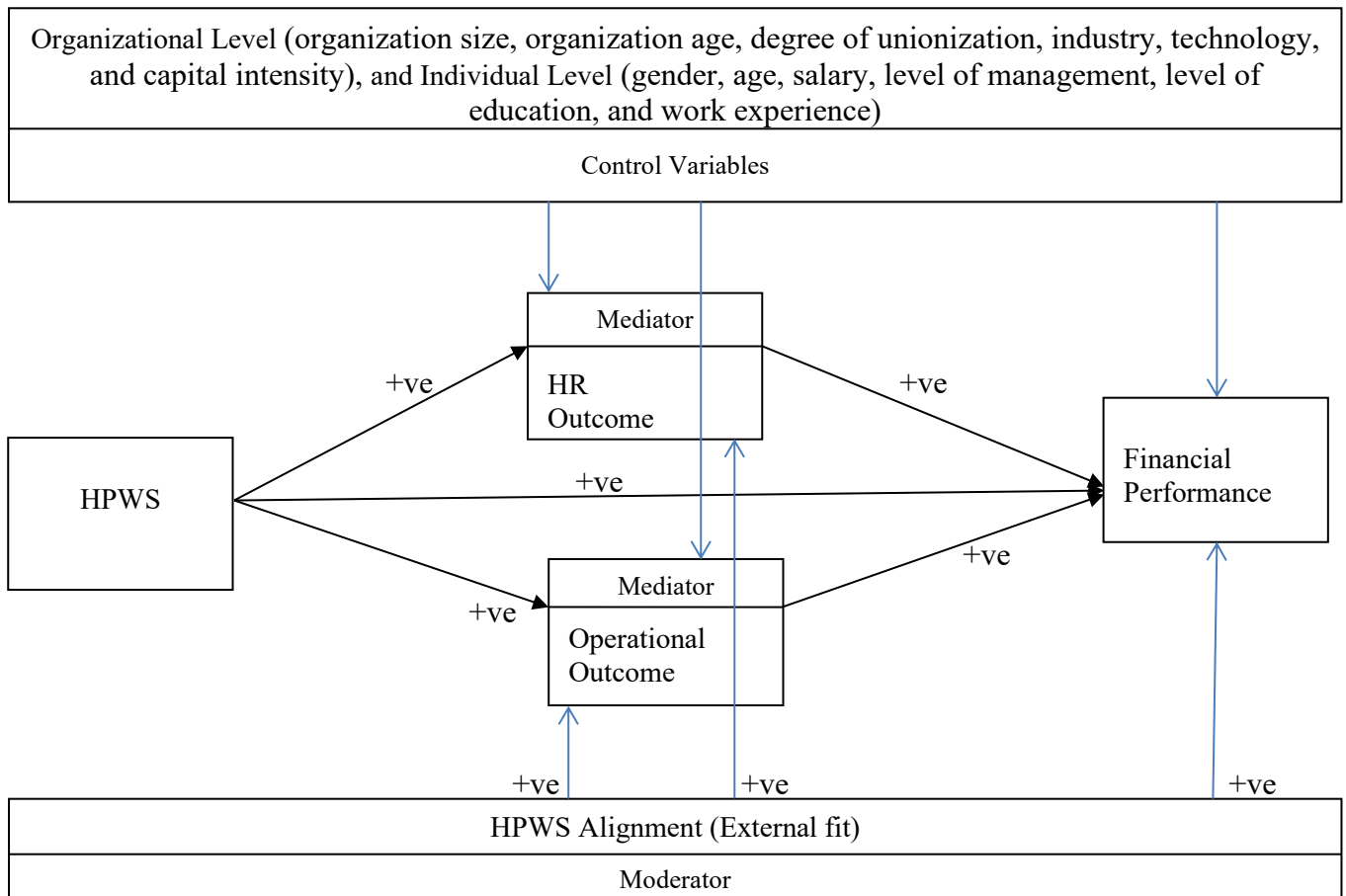
Hypothesis 2: External fit between the public enterprises HPWS practices with their competitive strategy positively moderates the relationship between HPWS and operational outcome in public enterprises in Ethiopia.

Hypothesis 3: External fit between the public enterprises HPWS practices with their competitive strategy positively moderates the relationship between HPWS and financial performance in public enterprises in Ethiopia.

Hypothesis 4: External fit between the public enterprises HPWS practices with their competitive strategy positively moderates the indirect relationship between the HPWS and financial performance of the public enterprises via HR outcome.

Hypothesis 5: External fit between the public enterprises HPWS practices with their competitive strategy positively moderates the indirect relationship between the HPWS and financial performance of the public enterprises via operational outcome.

Figure 1 - Conceptual Framework



Source: Author's Design (2024).

3. Methodology

This research used cross-sectional survey research strategy to test contingency theory by using the organization as a unit of analysis. The top, middle, and lower level managers of nine public enterprises were the research population for this study. With a 95 per cent confidence level, 5

per cent level of accuracy, and assuming maximum of 50 per cent of the enterprise's people being in the management category, this study used the maximum possible sample size of 400 (De Vaus, 2002). However, as there would still be a non-response rate of 20 per cent even after using good techniques (De Vaus, 2002), and in expectation of a low survey response rate, the study drew an initial sample size that is larger than the expected amount by 20 percent; resulting in a total sample size of 480.

A structured questionnaire was created based upon validated items from previous research works on HPWS to collect data from the managers of the public enterprises who were working in the headquarters of the enterprises. The items in the questionnaire were designed using five-point Likert scale that allowed respondents to express their degree of agreement or disagreement. In addition to items that measured the constructs, the study controlled for both individual and organizational level variables. Pilot testing was also performed with fifty participants who worked in four public enterprises.

To examine the suitability of the scales, the reliability and validity of the items in the questionnaire were tested. The result of the Cronbach's alpha and composite reliability test that were used to assess the construct reliability of the items demonstrated values that exceeded the recommended minimum value of 0.70. After that, convergent validity and discriminant validity tests were employed. The findings of the tests reveal the convergent and discriminant validity of the scales as the average variance extracted and Heterotrait-Monotrait ratio assessment results were above 0.5 and below 0.9 respectively.

After the validity and reliability of the indicators were established, confirmatory factor analysis was computed. Accordingly, measurement items with loadings below 0.60 were excluded from further analysis (Table 1).

Table 1 - Confirmatory Factor Analysis

Construct	Item	Standardized Factor Loading	t-value
HPWS	HPWS1	0.635	**
	HPWS2	0.757	11.506
	HPWS3	0.791	11.440
	HPWS4	0.730	11.229
	HPWS5	0.704	10.963
	HPWS6	0.668	10.518
	HPWS7	0.632	10.627
HR Outcome	HRO1	0.845	**
	HRO2	0.801	20.288
	HRO3	0.858	17.525
	HRO4	0.785	15.130
	HRO5	0.665	11.435
	HRO6	0.609	11.625
Operational Outcome	OO1	0.827	**
	OO2	0.857	18.001
	OO3	0.712	14.361
Financial Performance	FP1	0.854	**
	FP2	0.859	19.792
	FP3	0.843	16.501
	FP4	0.795	17.707
External Fit	EF1	0.823	**
	EF2	0.774	15.503
	EF3	0.609	11.649

Note: ** = Items constrained for identification purposes.

Source: Researcher's Field Results (2024).

The model fit statistics also shows the measurement model's overall goodness of fit; CMIN = 2.681, CFI = 0.923, IFI = 0.924, TLI = 0.907, SRMR = 0.0475, and RMSEA = 0.069. In addition, the analysis results of the structural model illustrated in Figure 1 demonstrates that the model fits with the observed data well; CMIN = 2.726, CFI = .907, IFI = .910, TLI = .90, SRMR = 0.0472, and RMSEA = 0.070. Finally, SEM was used to perform the analysis and see the relationship among the constructs simultaneously.

4. Results

The result of the full structural model analysis of the study is presented in this section. It discusses the findings of the hypotheses testing that tested the direct and indirect moderating relationships among the HPWS, external fit, HR outcome, operational outcome, and financial performance constructs.

4.1 Moderated Direct Relationships

The moderating effects of external fit in the direct relationship between the HPWS and HR outcome, operational outcome, and financial performance of the public enterprises in Ethiopia are discussed as follows. The moderated direct relationships are summarized in Table 2.

Table 2 - Test for Moderated Mediation Using 95% Confidence Interval

Moderated Direct Relationships			Coefficient	t-values	p-value	Decision
External Fit → HR Outcome			.143	2.352	.019	
External Fit → Operational Outcome			.191	3.196	.001	
External Fit → Financial Performance			-.167	-2.373	.018	
HPWS X External Fit → HR Outcome			-.012	-.163	.871	not supported
HPWS X External Fit → Operational Outcome			-.139	-1.883	.060	not supported
HPWS X External Fit → Financial Performance			.050	.589	.556	not supported
Moderated Indirect Relationships*		Direct Effect	Indirect Effect	Confidence Interval Low/High	p-value	Decision
Path 1: HPWS → HR Outcome → Financial Performance		0.412	.083	-.003/.195	.056	
Path 2: HPWS → Operational Outcome → Financial Performance		0.412	.209	.057/.410	.005	
Probing Moderated Indirect Relationships for path 1						
Low Levels of External Fit		.084	.006/.208	.037		
High Levels of External Fit		.081	-.007/.201	.065		
Probing Moderated Indirect Relationships for path 2						
Low Levels of External Fit		.297	.103/.553	.003		
High Levels of External Fit		.120	-.070/.314	.213		
Index of Moderated Mediation for path 1			-.002	-.041/.034	.661	not supported
Index of Moderated Mediation for path 2			-.121	-.265/.030	.105	not supported

Note: * = The indirect effect is moderated by the construct of External Fit.

Unstandardized coefficients reported. Bootstrap Sample = 5,000 with replacement.

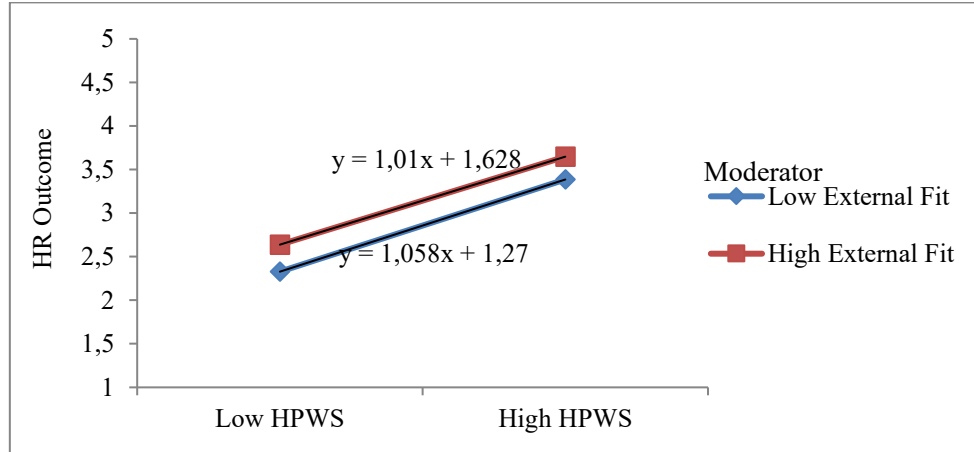
Source: Researcher's Field Results (2024).

4.1.1. HPWS, External Fit, and HR Outcome

Hypothesis 1 investigated the association among HPWS, external fit, and HR outcome. It was hypothesized that there would be a positive association between the interaction effect of HPWS and external fit, and HR outcome. The finding revealed that external fit did not moderate the direct relationship between HPWS and HR outcome ($\beta = -.012$, $t\text{-value} = -.163$, $p = .871$). As a result, the

study failed to reject the null hypothesis. To better understand the moderating role of external fit in the relationship between HPWS and HR outcome, a simple slope analysis was performed. It can be seen from Figure 2 that the slope of the line for Low External Fit is much steeper than the slope of the line for High External fit.

Figure 2 - HPWS and HR outcome interaction



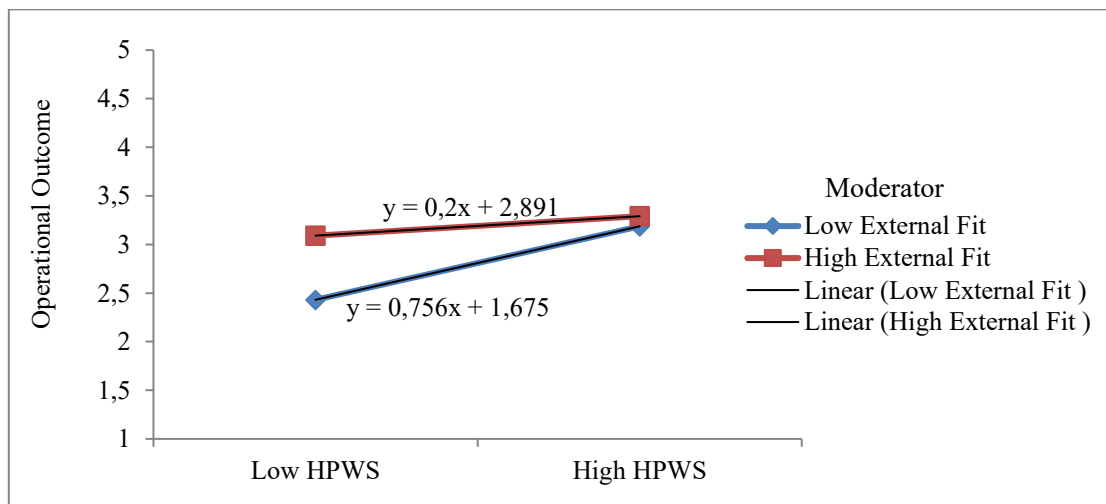
Source: Researcher's Field Results (2024).

This result indicates that at high level of external fit the impact of HPWS on HR outcome is weaker than low external fit. With an enhanced level of external fit, the strength of association between HPWS and HR outcome decreased. Therefore, external fit dampens the positive relationship between HPWS and HR outcome.

4.1.2. HPWS, External Fit, and Operational Outcome

Hypothesis 2 examined the relationship among HPWS, external fit, and operational outcome. It was hypothesized that there would be a positive relationship between the interaction effect of HPWS and external fit, and operational outcome. The result established that external fit did not moderate the path from HPWS to operational outcome ($\beta = -.139$, $t\text{-value} = -1.883$, $p = .060$). Thus, the study failed to reject the null hypothesis. Figure 3 displays the result of the slope analysis performed to better understand the nature of the moderating effect of external fit between HPWS and operational outcome.

Figure 3 - HPWS and operational outcome interaction



Source: Researcher's Field Results (2024).

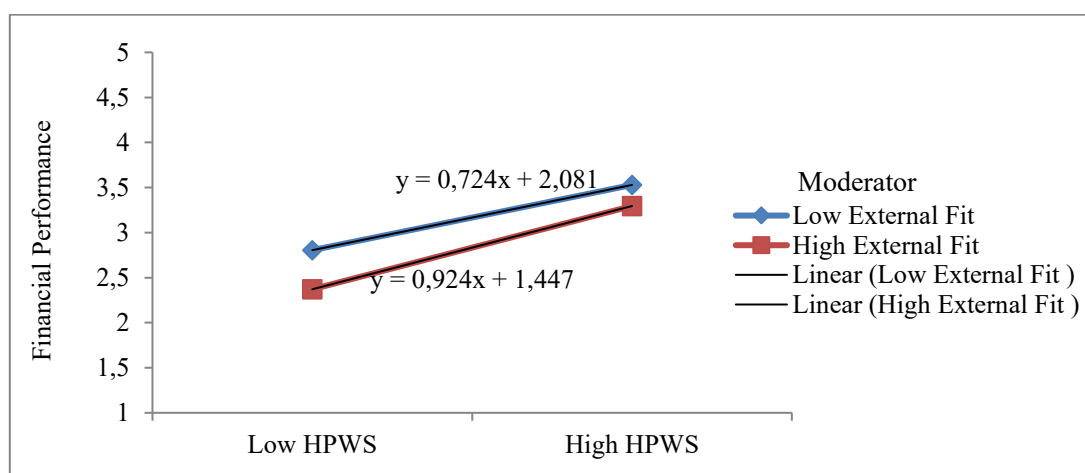
As can be seen from the Figure 3, the line is much steeper for Low External Fit than High External Fit; this reveals that at high level of external fit, the consequence of HPWS on operational outcome is weaker as compared to low external fit. As the level of external fit increased, the strength of association between HPWS and operational outcome decreased. As a result, external fit dampens the positive relationship between HPWS and operational outcome.

4.1.3. HPWS, External Fit, and Financial Performance

Hypothesis 3 tested the link among HPWS, external fit, and financial performance. It was hypothesized that there would be a positive relationship between the interaction effect of HPWS and external fit, and financial performance in public enterprises in Ethiopia. The result depicts that external fit did not moderate the path from HPWS to financial performance in the public enterprises ($\beta = .050$, $t\text{-value} = .589$, $p = .556$). Therefore, the study failed to reject the null hypothesis.

Slope analysis was conducted to get a better picture of the moderating effect of external fit in the relationship between HPWS and financial performance. It can be observed from Figure 4 that High External Fit has much steeper line than Low External Fit.

Figure 4 - HPWS and financial performance interaction



Source: Researcher's Field Results (2024).

This exhibits that the contribution of HPWS on financial performance is much superior with high external fit in comparison to low external fit. With an improved level of external fit, the strength of association between HPWS and financial performance increases. Therefore, external fit strengthens the positive relationship between HPWS and financial performance.

4.2 Moderated indirect Relationships

The moderating effects of external fit in the indirect relationship between HPWS and financial performance via HR outcome and operational outcome of the public enterprises in Ethiopia are examined in the subsequent sub-sections. The moderated indirect relationships are summarized in Table 2.

4.2.1. External Fit and the Indirect Path from HPWS to Financial Performance via HR Outcome

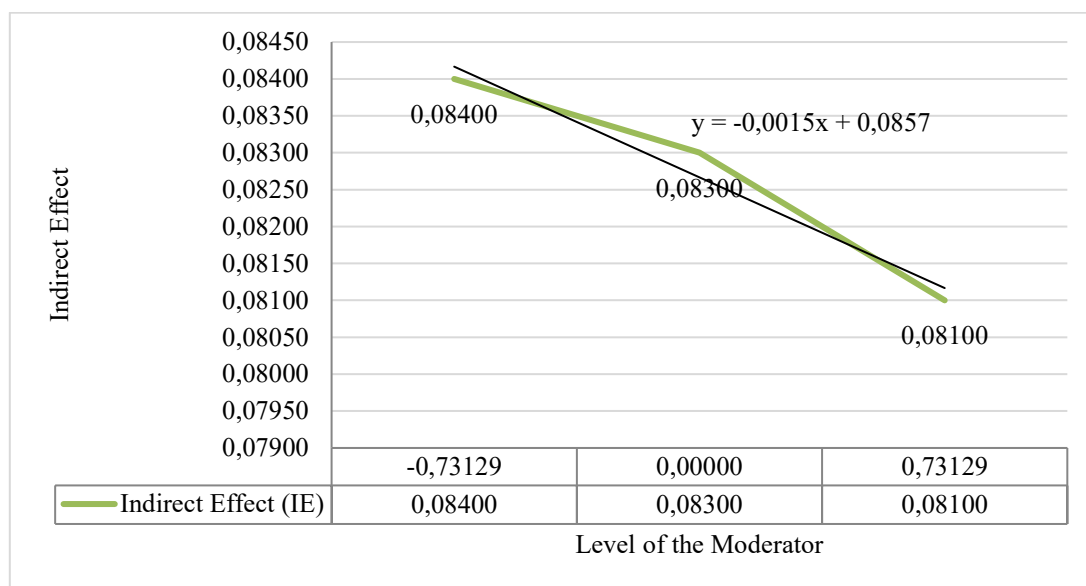
Hypothesis 4 examined if external fit had moderated the indirect effect of HPWS on financial performance via the HR outcome of public enterprises in Ethiopia. It was hypothesized that the indirect path from HPWS to financial performance through HR outcome would be moderated positively and significantly by the moderating construct. The result showed that the path from HPWS to financial performance by means of HR outcome was not significant in the presence of the moderating construct ($\beta = .083$, $p = .056$). The result of the index of moderated mediation (IOMM) analysis also corroborated that external fit did not have a significant moderating effect on

the indirect relationship between HPWS and financial performance via the HR outcome mediating construct ($\beta = -.002$, $p = .661$). For that reason, the study failed to reject the null hypothesis.

To have an enhanced understanding of how moderation is functioning in the study model, a spotlight analysis to moderation testing was performed. Accordingly, the moderated indirect relationship between HPWS and financial performance was examined to get a better picture of how the association between HPWS and financial performance via HR outcome changes in various levels of the moderating construct. In view of that, new low level moderator and high level moderator constructs were formed using one SD below and one SD above the mean of the original moderator construct respectively. After that, the two newly created moderating constructs were named “Low Levels of External Fit” and “High Levels of External Fit”.

Figure 5 shows the result of the spotlight analysis to moderation testing to get better insight of how the external fit moderates the indirect path from HPWS to financial performance via HR outcome at various levels of the moderator.

Figure 5 - Indirect effect of HPWS on financial performance via HR outcome



Source: Researcher's Field Results (2024).

The result of the slope analysis illustrates the inverse relationship between external fit and the indirect effect of HPWS. This reveals that at high levels of external fit, the indirect effect of HPWS on financial performance via HR outcome is negative and much weaker in contrast to low levels of external fit.

It can also be observed from Table 3 that a one SD increase in the level of external fit decreases the indirect effect of HPWS on financial performance via HR outcome insignificantly from .083 to .081 (change in indirect effect = $-.002$, $p = .065$). On the contrary, a one SD decrease in the level of the moderating construct from the mean centered level positively and significantly increases the indirect effect of HPWS on financial performance through HR outcome from .083 to .084 (change in indirect effect = $.001$, $p = .037$). Hence, as the indirect association between HPWS and financial performance via the HR outcome construct is almost perfectly negative (see Figure 5), a high level of external fit has a weakening property and severely diminishes the indirect association between the HPWS and financial performance of the public enterprises in Ethiopia through the HR outcome construct.

Table 3 - Indirect Effect of the Moderator at High Levels and Low Levels via HR outcome

Level of the moderator	Indirect effect from HPWS to Financial Performance*	p-value
High Moderator Level	.081	.065
Mean Centered Level	.083	.056
Low Moderator Level	.084	.037

Note: * = The indirect effect is moderated by the construct of External Fit.

Unstandardized coefficients reported. Bootstrap Sample = 5,000 with replacement.

Source: Researcher's Field Results (2024).

4.2.2. External Fit and the Indirect Path from HPWS to Financial Performance via Operational Outcome

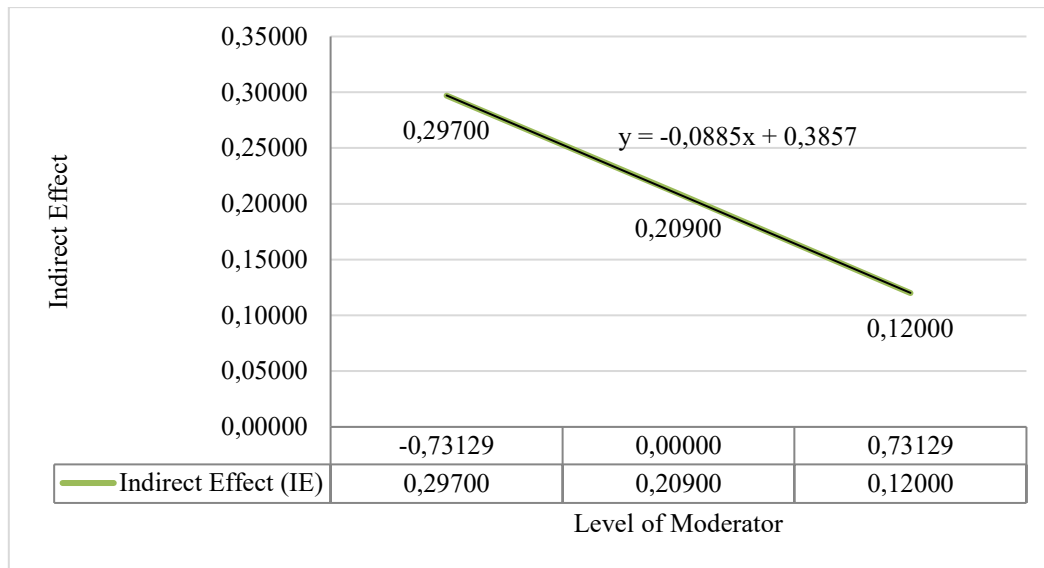
Hypothesis 5 tested if external fit had moderated the indirect effect of HPWS on financial performance via the operational outcome of public enterprises in Ethiopia. It was hypothesized that the indirect path from HPWS to financial performance by way of operational outcome would be moderated positively and significantly by the moderating construct. The finding indicated that the path from HPWS to financial performance by means of operational outcome was significant in the presence of the moderating construct ($\beta = .209$, $p = .005$). Nevertheless, the result of the IOMM analysis showed that external fit did not have a significant moderating effect on the indirect relationship between HPWS and financial performance via the operational outcome mediating construct ($\beta = -.121$, $p = .105$). So, the study failed to reject the null hypothesis.

To obtain an improved understanding of the way moderation is functioning in the study model, a spotlight analysis to moderation testing was carried out. Thus, the moderated indirect relationship between HPWS and financial performance was probed to get a better picture of how the connection between HPWS and financial performance via operational outcome changes in different levels of the moderating construct. Consequently, new low level moderator and high level moderator constructs were generated using one SD below and one SD above the mean of the original moderator construct respectively. Then, the two newly created moderating constructs were named “Low Levels of External Fit” and “High Levels of External Fit”.

To get a better understanding of how external fit moderates the indirect path from HPWS to financial performance via operational outcome, a spotlight analysis to moderation testing was conducted at different levels of the moderator. As can be seen from Figure 6, the finding of the slope analysis reveals that there is a perfect inverse negative association between external fit and the indirect influence of HPWS on financial performance by way of operational outcome. This demonstrates that at high levels of external fit, the indirect impact of HPWS on financial performance is weaker as compared to low levels of external fit. As depicted in Table 4, enhancing the level of the moderator from the mean centered level by one SD diminishes the indirect effect of HPWS on financial performance via operational outcome from .209 to .120 (change in indirect effect = $-.089$, $p = .213$).

Conversely, reducing the level of external fit from the mean centered level by one SD significantly improves the indirect effect of HPWS on financial performance by way of operational outcome from .209 to .297 (change in indirect effect = $.088$, $p = .003$). Consequently, as the strength of indirect relationship between HPWS and financial performance via operational outcome becomes inferior with an increase in the level of the moderator, it can be concluded that a high level of external fit sharply reduces the indirect effect of HPWS on the financial performance of public enterprises in Ethiopia by means of the operational outcome construct.

Figure 6 - Indirect effect of HPWS on financial performance via operational outcome



Source: Researcher's Field Results (2024).

Table 4 - Indirect Effect of the Moderator at High Levels and Low Levels via Operational Outcome

Level of the moderator	Indirect effect from HPWS to Financial Performance*	p-value
High Moderator Level	.120	.213
Mean Centered Level	.209	.005
Low Moderator Level	.297	.003

Note: * = The indirect effect is moderated by the construct of External Fit.

Unstandardized coefficients reported. Bootstrap Sample = 5,000 with replacement.

Source: Researcher's Field Results (2024).

5. Discussion

Theoretical works on HPWS provide convincing argument that creating better alignment between HPWS practices and competitive business strategy will enhance organizational performance. In addition, previous theoretical and empirical works propose that HPWS practices impact HR outcome and operational outcome; the HR and operational outcomes then mediate the relationship between the practices and financial performance. The results of this research demonstrate that operational outcome had a significant complementary partial mediation effect in the link between the HPWS and financial performance of the public enterprises in the presence of the moderating construct than HR outcome at $p < 0.05$. This shows that higher level of HPWS leads to improved innovation, quality, and customer satisfaction, which in turn, positively impacts the financial performance of the public enterprises. This study, however, found no evidence in support of the moderating effect of external fit in the direct associations among the study constructs, and the indirect relationships between HPWS and financial performance via the HR outcome and operational outcome mediators.

While the moderated direct relationships exhibit that high levels of the moderating construct strengthen the positive relationship between HPWS and financial performance than low levels of external fit, it dampens the positive association with HR and operational outcomes. In addition, a high level of external fit has a weakening property and severely diminishes the moderated indirect associations between the HPWS and financial performance of the public enterprises through the HR and operational outcome mediators. A one SD increase in the level of external fit from the mean

centered level decreases the indirect effect of HPWS on financial performance via HR outcome from .083 to .081 and operational outcome from .209 to .120. On the contrary, decreasing the level of external fit from the mean centered level by one SD significantly improves the indirect effect of HPWS on financial performance by way of operational outcome from .209 to .297 and HR outcome from .083 to .084.

In spite of the logicity of the theoretical arguments, these findings suggest that public enterprises in Ethiopia do not attain HR, operational, and financial benefits by investing their time and money to align their HPWS practices with their competitive business strategies. Therefore, the simple use of HPWS is more essential and saves the resources of the public enterprises than any exertion to guarantee these practices are externally aligned with the business strategy of the organizations. The lack of support for the positive effect of strategic fit on organizational performance may be due to the complexity of identifying what comprises good fit (Becker & Gerhart, 1996), or the strategic configuration of HPWS practices may be idiosyncratic and intricate (Barney, 1991). Hence, as external fit has compelling theoretical justifications, more research works with refined methods such as longitudinal research design are required before refuting the moderating effect of external fit.

6. Conclusion

The results of the study show that external fit did not have a significant moderating effect in the direct and indirect relationships between and among the study constructs; hence, found no support for contingency theory. For that reason, the managers of the public enterprises in Ethiopia should focus more on strengthening the main effect of the HPWS than trying to ensure the existence of alignment between the HPWS practices with the competitive strategies of the public enterprises. The research used cross-sectional data, which limits its ability to make inferences about causality. Although the study used simultaneous equations with the help of SEM, did not have response bias, and extensively controlled for both organizational and individual level control variables, the issue of temporal precedence should be addressed before claiming causality. Therefore, future research might use a longitudinal research design to collect data on both HPWS practices and organizational outcome constructs to conclusively understand the nature of relationship and causality between the constructs.

The findings of this research have two important theoretical implications to the existing literature. First, the results of the study generated data that refute the best-fit approach (contingency theory) in the public sector in a developing country context. In contrast to the universalistic theory, the contingency theory assumes that organizational performance is contingent up on the existence of vertical integration between an organization's HPWS practices with its competitive business strategy (Golding, 2004; Knies et al., 2018); it argues that organizations that have HPWS that is aligned with their competitive business strategy perform better than those that do not have (Delery & Doty, 1996). However, the results of the study showed that external fit had no significant direct or indirect moderating effects on any of the relationships between HPWS, HR outcome, operational outcome, and financial performance of the public enterprises in Ethiopia. Thus, provide evidence that the mere adoption of HPWS practices is more essential than any attempts to ensure such practices have alignment with the competitive strategies of the enterprises.

Second, the finding provides evidence supporting the existence of indirect relationship between HPWS and financial performance via the operational outcome mediating construct. The mechanism through which HPWS contributes to organizational performance was suggested by Guest (2011) to be the main focus of future researches. He proposes that HPWS practices impact HR outcomes and operational outcomes; the HR and operational outcomes then mediate the link between the practices and financial performance (Guest, 2011). HR outcomes and operational outcomes are also proposed by various scholars to mediate the association between HPWS practices

and organization performance (Becker, Huselid, Pickus, & Spratt, 1997; Guest 2011; Huselid, 1995; MacDuffie, 1995). Although the result of the study demonstrated that operational outcome has a positive and significant partial mediating effect in the relationship between HPWS and financial performance in the public enterprises, it was not able to find evidence supporting the mediating role of HR outcome in the nexus between HPWS and financial performance.

Besides the academic contributions discussed above, the findings of the study have important practical implications for policymakers, public officials, and managers of the public enterprises. HPWS was linked positively and significantly to the financial performance of the public enterprises in Ethiopia; it had a significant positive indirect association with the more distal measure of organizational outcome via operational outcome; that is, the use HPWS helped the enterprises to have innovative and quality products with satisfied customers, which, in turn, led them to get better financial performance. This indicates that the way the HRs of the enterprises are managed can play a significant positive role in the performance of the public enterprises. In addition, as the findings of the study did not support the moderating effect of external fit, it is important for the managers of the public enterprises to focus more on strengthening the main effect of HPWS than attempting to ensure the existence of alignment between the HPWS practices with the competitive strategies of the enterprises.

Moreover, the results of the study demonstrated that the use of HPWS significantly contributes to organizational performance beyond and above other well-known drivers of organizational performance. As the study extensively controlled for organizational and individual level control variables based up on the literature, the study highlights to the managers of the public enterprises the significance of HPWS to organizational performance irrespective of the environment. As long as the managers of the public enterprises effectively implement HPWS, they can expect to see added benefits to their organization regardless of the organization age, organization size, capital intensity, organization sector, degree of unionization, and level of technology.

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