

The Moderating Effect of HRM practices in the link between Top management Support and Employee Engagement in the Jordan MOSD

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Abstract: - The objective of this study is to investigate the moderating effect that human resource management (HRM) practices have on the relationship between top management support and employee engagement in a context of Jordanian Ministry of Social Development (MOSD). In this study, data were collected from 390 employees with an electronic questionnaire of 24 questions using descriptive survey design analysis and analysed by SmartPLS4 and SPSS 26. The results have revealed that, the moderation effect of HRM practices on the top management support and employee engagement relationship is minimal. However, top management support and HRM practices independently act as significantly positive predictors of employee engagement. This study indicates that MOSD needs to further improve HCM practices such as career development, supportive working environment, and HR policies in order to maintain a higher level of employee engagement.

Key-Words: - Human Resource Management (HRM), Top Management Support, Employee Engagement, Organizational Support, Public Sector, Moderating Effect, Career Development, Work Environment, Jordanian Ministry of Social Development (MOSD).

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1 Introduction

Employee Engagement is the emotional commitment an employee has to a company and its goals. It is a measure of spirit; commitment to the fate of the organization and the positive inclination to make every effort distinguish it from job satisfactions factor (which this one is mainly used by measures about how happy quality improvement staff with their role) are [1]. Engaged employees not only work harder, but they also promote the brand so that their employer has a good reputation and performs better as a whole.

In the current competitive market, employee engagement is a strategic imperative for firms who want to be attractive and keep talent, stimulate innovations, and maintain a solid culture, [2]. High engagement leads to greater productivity, less employee turnover, better service and more

organizational loyalty. This means that private and public sector bodies should create and maintain employee engagement on a local basis.

Obtaining high level of engagement needs cooperation between senior management and the Human Resources Management (HRM) staff, [3]. Engaged employees are those who work with enthusiasm and passion, demonstrating strong organizational commitment, [4]. When you show that you value them and are supportive of them, employees will give back with dedication and better performance. Human resource management (HRM) also has an important part in this area by conducting practices such as equitable pay, training and developing, career pathing, recognition plans, performance evaluation system for employees and communication with them, [5], [6] which improves

the perceived organizational support of employees and leads to positive workplace behavior.

The research is based on the Social Exchange Theory (SET), which understands engagement as a relation of reciprocities: when organizations give resources and support, employees feel obliged to do the same with higher levels of engagement and commitment. Even though the value of employee engagement has been well accepted, public-sector institutions in Jordan such as MoSD have difficulty maintaining high levels of staff engagement. Also, there are few studies examine the effect of top management support on engagement and whether HRM practices may enhance this relation in Jordanian public social work sector.

The purpose of this paper is to: (a) examine the effect of top management support on employee commitment in MoSD and (b) investigate the moderating role of HRM practices on this relationship. It is suggested that TMS HRM with and TOP MGT support predict a rise in engagement hypotheses: Hypotheses to be examined are 1. The influence of TOP MGT and its impact on engagement 2. The role of HRM practices: HRM practices positively influence engagement 3. TMS – Engagement: The stronger the HRM practices, then the stronger is engagement. Applying a descriptive-analytical approach and material analysed by Smart PLS and SPSS 26, this study has theoretical contributions & practical implications for managers / decision makers in the MoSD in Jordan.

2 Literature Review

2.1 Employee Engagement

Both scholars and practitioners have displayed increasing attention to employee engagement, given its beneficial effects on organizational effectiveness as well as individual employee outcomes. However, there is no consensus on its meaning in research, [6], [7], [8], [9]. [10] was the first to use the term “engagement,” defining it as the energy people bring to their engagement in a work role. An engaged employee is one who has very high degrees of physical, cognitive and emotional presence in his/her work. [11] defined it as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.” Likewise, [12] depict engagement as emotional attachment to the job and organization entrusting employees to bringing their best at work and communicating effectively. High levels of employee engagement can have a positive impact on

productivity, the quality of service and competitiveness of the organization.

2.2 Human Resources Management Practices

Institutions in the government sector need to adopt Human Resource Management [HRM] strategies, which are vital in recruiting and maintaining qualified employees. According to [13], human resource management practices include the many actions an organization intends to take to efficiently manage its pool of human resources and ensure that those resources align with accomplishing its objectives. On the other hand, human resource management methods are also recognized as essential activities that assist the company in developing and shaping the skills, capabilities, and behavior to help those individuals succeed in their jobs and concentrate on accomplishing organizational objectives, [14]. Regarding human resource management practices, [5] encourage encourages employees to fulfill their job objectives and provide personal growth opportunities. [15] said that ensuring that enough resources are made available via efficient HRM procedures may guarantee that it ensures that employees' interests and welfare are taken care of, which gives employees the impression that they are valued. Because of this, human resource management methods have the potential to produce a productive work environment that encourages employee growth if they are managed well.

2.3 Top Management Support and Employee Engagement

Support from senior management is proven crucial to increasing employee engagement, and thereby organizational performance. According to [16], when leaders engage with efforts to promote engagement, a virtuous cycle of mutual benefit between the organization and the employee will develop. And managers need to be aware and talk about the value it brings. This support can take the form of resources—such as time, money, or equipment—that we provide. [17] and [18], when employees perceive that top management is committed to their engagement, they are likely to follow such commitment. Promoting a workplace where employees feel listened to and appreciated is important; [19] propose open-door policies, suggestion boxes and regular feedback session. Firm-level acknowledgment of employee contributions in the form of, for example, awards or bonuses and/or informal via e-mails of appreciation

or public acknowledgement further encourage morale and motivation [20], [21], [22]. As the new opportunities are supported by sea levels, productivity, innovation, and engagement are prompted by top management anglers. The mousetrap is only a symbol in that it promotes good behavior.

H1: Support from top management has a positive impact on the extent of employees' engagement.

2.4 Employee Engagement and Human Resources Management Practices

Human Resource Management (HRM) practices such as training, development performance appraisal and reward management significantly influence employee engagement, [23]. Good training improves employees' job skills, career growth, and work life by enhancing a good working environment that provides motivation and job satisfaction, [24]. Training enhances competence, confidence, work satisfaction and commitment to organizational objectives by teaching employees how to perform tasks effectively, [25]. Employees are more motivated to perform when they feel that the organization invests in their development and values their work, [26].

Compensation also affects engagement. As they moderate employee perceptions of their value, support talent retention, reduce the psychologically withdrawn behavior and increase trust through fairness perception, [27], [28], [29], [30], [31]. Clearly-structured compensation systems darken the minds of average employees with frustration and make their faces look sad Rational pay structure and reward system can enhance the perceived value, satisfaction, loyalty as well as work efficiency of employees, [32]. Feedback and expectation setting, the way employees are hooked into the organization goals on career advancement lay a foundation for employee commitment and retention, [33], [34], [35], [36].

Efficient training, reward and performance appraisal systems can synergistically drive engagement, motivation, productivity and organizational effectiveness.

H2: The Practices of Human Resource Management lead directly to employee engagement.

2.5 HRM practices [Moderator]

Human resource management methods need to be supported and prioritized by top management to guarantee that they are correctly executed and aligned with the organization's strategic objectives. However, to cultivate a culture of engagement, it is

essential to carry out effective human resource management procedures. Thus, through the establishment of a culture that is characterized by trust and dedication, genuine support from upper management has the potential to boost employee engagement significantly. Although many factors reflect employee engagement, the HRM practices are the most important factor that impacts employees engage, [37]. Most past studies have used HRM practices as a predictor of employee satisfaction. The current study takes HRM practices as a moderating factor in the relationship between top management support and employee engagement. Figure 1 illustrates the research model of the study. This moderating factor was added to the study due to weak or inconsistent evidence in the literature [38] regarding the effect of top management support on employee engagement. In past discussions on employee engagement, the literature confirmed that top management support has a positive relationship with employee engagement, [39]. Moreover, due to empirical evidence proving the link between HRM practices and employee engagement and the top management support, [40], [41], this study believes that a higher HRM practices would increase the employee engagement. Hence, the next hypothesis is:

H3 The positive relationship between top management support and employee engagement will be stronger when the HRM practices are high.

3 Theoretical Frameworks

[42] and further elaborated by [43] and [44], the key tenet of Social Exchange Theory [SET] expounds that human behavior in an organizational relationship is constructed upon reciprocity. In work settings, after they experience support from fair and equitable treatment, recognition at the workplace, training opportunities, and management backing; employees feel encouraged to exhibit in supportive behaviors like commitment, job involvement, and satisfaction. Applying SET to the Ministry of Social Development in Jordan, HR practices such as training, performance management and pay indicate organizational investment in personnel whereas top management support represents appreciation and worth. Therefore, employees who perceive themselves to be appreciated and treated fairly are willing to do more than just show up for work demonstrating reciprocal dedication towards their job.

Human Resource Management (HRM) practices were modeled as a higher-order construct composed of three first-order dimensions: training and

development, performance appraisal, and compensation.

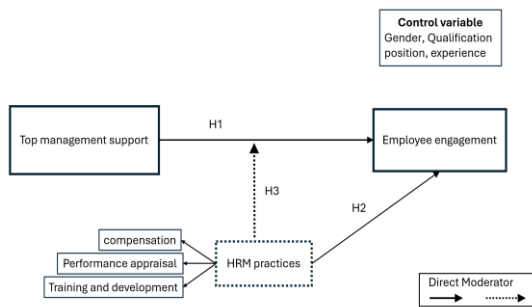


Fig. 1: Theoretical framework

Source: Developed by the authors based on the literature

This hierarchical structure reflects the integrated nature of HRM systems, where multiple HR practices collectively influence employee outcomes rather than functioning independently. Modeling HRM practices as a higher-order construct allows the study to capture the combined strategic influence of these practices on employee engagement. Each first-order construct was measured using multiple indicators, and the higher-order construct was assessed using the repeated indicator approach within the PLS-SEM framework.

4 Methodology

4.1 Sampling and Data Collection

The survey was restricted to the Ministry of Social Development workers due to its emphasis on employee involvement within that ministry. This led to the use of a purposive sampling strategy. Since this study's focus was on the theoretical influence of the research framework's variables, a convenience sample strategy was also deemed appropriate by [45] and [46]. Participants in the research may only be employees. Therefore, managers were not included in the study. This information was provided via a Google Forms poll conducted online. The MOSD official website served as the online survey platform. Quantitative investigations rely on sample size. According to the Smart PLS literature [47], the power of analysis is used to define the sample size, which is in turn influenced by the complexity of the model. Based on the table produced by [48], the minimal sample size for the research was 77, as suggested by [49], with a power of 80%, a medium effect size, and a significance level of $p = 0.05$. A grand total of 390 surveys were

sent back. Therefore, our study's sample size was enough (Table 1).

Table 1. Demographic details, social, educational, and administrative of the respondents

group		Frequency	Percentage
gender	Male	161	41.3
	Female	229	58.7
Qualification.	High school	83	21.2
	Diploma	98	25.2
	Bachelor's degree	158	40.5
	Master's degree and more	51	13.1
experience	less than five years	83	21.3
	5-10 years	134	34.4
	11-15 years old	115	29.5
	More than 15 years	58	14.8
position	Head department	131	33.6
	Administrative/ Technical position	259	66.4

Source: Authors' own calculations based on survey data (2026)

4.2 Instrument Development

The instrument was developed based on the latent constructions mentioned in the research model. All the construct items were adopted from previous studies. Items of top management support were adopted from [50]. Items of employee engagement were adopted from [51]. Meanwhile, items of HRM practices were obtained from [52]. A five-point Likert scale was used to assess all independent variables, whereas a seven-point Likert scale was used to test the dependent variable. Two separate Likert scales were used to decrease common method variance [CMV]. since due to the independent and dependent variables were collected from the same source [46].

5 Data Analysis

This study used software developed by [53], Smart Partial Least Squares [PLS] version 4.1. PLS uses variance-based Structural Equation Modelling [SEM]. In addition, the research used Smart PLS software for data analysis, which included reflective assessments, [54]. It is recommended that the data normality be checked using multivariate skewness and kurtosis before moving on to the measurement model. This recommendation comes from prior research by [46] and [54]. Both Mardia's multivariate skewness [$\beta = 2.817, p \geq 0.01$] and kurtosis [$\beta = 46.773, p \geq 0.01$] were shown by the

data. Thus, the data was marginally non-normal, confirming that Smart PLS was appropriate for this research. According to [46] and [55], research that use data from a single source may have a significant problem with common method variance. This research used statistical and procedural approaches to get around this problem. For further information on how this research measured the constructions using the procedural method, refer to [55]. A 7-point Likert-type scale was used to evaluate repurchase intention, while the other components were assessed using a 5-point Likert-type scale.

5.1 Measurement Model

To test the theory of the study, the authors employed a two-pronged approach to test the measurement models and the structural models. In the measurement model, the authors test the item's capability to measure their constructs. In the structural model, the relationship between the exogenous and the endogenous constructs is tested. In the measurement model test, the authors have to perform two tests of validity: the test of convergent validity and the test of discriminant validity.

Verifying that the items measure their intended concept requires establishing convergent validity. If the loading more than 0.5, and average variance extracted [AVE] more than 0.5, and composite reliability [CR] more than 0.7, then the reflective measurement for the LOC or HOC is valid and trustworthy [54]. Although a few items reported factor loadings slightly below the recommended threshold of 0.70, they were retained because their values remained above the minimum acceptable level of 0.50 suggested in PLS-SEM literature. Furthermore, removing these items did not substantially improve the composite reliability or average variance extracted (AVE) of the constructs. Since these indicators met the recommended thresholds and the items were theoretically important for capturing the dimensions of the constructs, they were retained to preserve the content validity of the measurement model (Figure 2, Appendix).

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preserve the content validity of the measurement model. Joseph F. Hair Jr., who note that loadings 0.50–0.60 may be acceptable in exploratory studies.

There was no issue with convergent validity in this investigation since, as shown in Table 2 all the prerequisites to establish it were met.

Table 2. Convergent Validity [Reflective]

Higher order	Lower order	Items	loadin g	CR	AVE
	Training and development	T&D1	0.853	0.944	0.772
		T&D2	0.881		
		T&D3	0.904		
		T&D4	0.876		
		T&D5	0.879		
	Performance appraisal	PA1	0.787	0.930	0.770
		PA2	0.914		
		PA3	0.895		
		PA4	0.909		
	Compensation	COM1	0.965	0.993	0.967
		COM2	0.988		
		COM3	0.992		
		COM4	0.987		
		COM5	0.984		
	Top Management Support	TMS1	0.909		
		TMS2	0.934	0.902	0.703
		TMS3	0.870		
		TMS4	0.596		
	Employee Engagement	EE1	0.815	0.903	0.612
		EE2	0.872		
		EE3	0.841		
		EE4	0.843		
		EE5	0.720		
		EE6	0.556		
HRM practices		T&D	0.779	0.662	0.854
		PA	0.856		
		COM P	0.804		

Note: Com: compensation; EE: employee engagement; PA: performance appraisal; T&D: training and development; TMS: top management support

Source: Authors' own analysis using SmartPLS4 based on survey data (2026)

To determine discriminant validity, one should follow the suggestion of, [56] and apply the hetrotrait monotrait [HTMT] correlation ratio. According to [56], all the HTMT values in this research were below 0.85, indicating that the measures had discriminant validity. Table 3 shows the outcomes of the HTMT ratio study.

Table 3. Discriminant validity [HTMT]

construct	COM	EE	PA	T&D	TMS
COM					
EE	0.481				
PA	0.555	0.823			
T&D	0.362	0.478	0.665		
TMS	0.295	0.490	0.375	0.414	

Note: PA: performance appraisal; T&D: training and development; TM-S: top management support; EE: employee engagement.

Source: Authors' own analysis using SmartPLS4 based on survey data (2026)

According to [57], the statistical technique revealed VIF values below 3.3, suggesting that CMV was not a major concern in this investigation. Following the procedures outlined in [54], the first step in identifying collinearity was to examine the values of the variance inflation factor [VIF] for each endogenous variable included in the study. According to [58], all the VIF values were determined to be below the crucial limit of 3.3.

5.2 Structural Model

The hypotheses were tested using a self-reassessment approach. The results of the hypothesis testing, as shown in Table 4 (Appendix), confirm all direct effect hypotheses. Regarding the first hypothesis, which indicates a positive effect of top management support [TMS] on employee engagement [EE], the results show a statistically significant positive correlation [$\beta=0.163$, $t=3.910$]: lower limit [LL]=0.093, upper limit [UL]=0.230, $p=0.001$. Consequently, Hypothesis H1 was confirmed. Regarding H2, the results of this study show a statistically significant positive correlation between the human resource management program [HRMP] and employee engagement [EE] [$L=0.483$, $UL=0.623$, $p=0.001$], as evidenced by the beta coefficient [$\beta=0.556$], the t -value=13.090, and a statistically significant correlation between HRMP and EE. Thus, Hypothesis H2 was confirmed. Regarding Hypothesis H3, it was proposed that the moderating role of HRMP positively influences the relationship between TMS and EE. The research results show a weak association between HRM practices and EE, with a beta value of [$\beta=-0.085$, $t=2.036$, $LL=-0.154$, $UL=-0.01$, $p=0.021$].

Therefore, it can be concluded that Hypothesis H3 is not supported (Figure 3, Appendix).

At an R^2 value of 0.515, the research demonstrated the ability to explain 0.515% of the variance in the dependent variable. The f^2 values, which indicate the magnitude of the factors' effects, are presented in Table 4 (Appendix). The effect sizes of 0.041 and 0.432 are considered small and large, respectively, according to [59] criteria. A higher f^2 value highlights the importance of the predictors.

5.3 Hypothesis Testing

The research model-based hypothesis testing, a crucial part of our study, involved a bootstrapping process with 5,000 resamples. This study revealed a positive relationship between top management support and employee engagement [H1] and a positive relationship between HRM practices and employee engagement [H2], thereby supporting H1 and H2. However, for the moderation analysis, the study also found that the relationship between top management support and employee engagement was weak when low-HRM practices were used. Hence, H3 is unsupported.

In addition to the blindfolding method, PLS prediction runs are advantageous, according to the literature, [60]. In the case when the PLS model's RMSE values are lower than those of the Linear Model [LM], it is presumed that the model exhibits less prediction error. In a study conducted by [60], it was shown that predictive power is great when all PLS models are lower than the LM model, and moderate when most PLS results are lower than the LM results. Low predictive power was seen when a subset of PLS findings were lower than LM results, and unverified predictive power was observed when all PLS results were greater than LM results (Table 5).

Table 5. PLS prediction

Items DV	PLS-RMSE	LM_RMSE	PLS-LM	Q ² predict
EE1	0.697	0.702	-0.005	0.347
EE2	0.681	0.680	0.001	0.322
EE3	0.672	0.678	-0.006	0.347
EE4	0.703	0.704	-0.001	0.262
EE5	0.713	0.714	-0.001	0.221
EE6	0.774	0.688	0.086	0.141

Source: Authors' own analysis using SmartPLS4 based on survey data (2026)

Control variables are used in research studies to account for factors other than the theoretical constructs of interest, thereby helping to explain the variance in a dependent variable. For example, several studies included respondents'

sociodemographic characteristics as individual-level control variables, [61]. Gender, education, work experience, and job title served as control factors in this research that also examined potential relationships between the variables. Further, no control variable had a statistically significant effect on the dependent variable, proving that they had no bearing on the relationships under investigation. According to [61], when looking at adoption studies at the unit level of analysis, control variables are not always essential.

6 Discussion

Based on the results, the present study examined the effects of moderate HRM practices, namely training and development, performance appraisal, and compensation, on the relationship between top management support and employee engagement among employees working in the Jordan Ministry of Social Development. The statistical results support two hypotheses. The results demonstrated that top management support positively and significantly affects employee engagement. The same applies to the second hypothesis: HRM practices positively and significantly affect employee engagement. That is to say; when employees perceive that the organization provides enough support and resources, they tend to have higher levels of engagement by exhibiting a high level of absorption, allowing them to focus on their work, give their full time and energy to fulfil and deliver the tasks assigned to them. On the other hand, the third hypothesis shows that HRM practices did not moderately affect the relationship between top management support with employee engagement, which indicates that human resources management practices did not work effectively within the Ministry of Social Development. The weak moderating role of HRM practices may also be influenced by contextual factors within public sector institutions in Jordan. Public organizations often operate within rigid bureaucratic structures and centralized decision-making systems that may limit the flexibility and effective implementation of HR practices. The results of this study are compatible with the literature on previous research. Top management support significantly affected employee engagement, consistent with prior research [44], [55], [58]. In line with the findings, HRM practices were discovered to influence employee engagement significantly, [19], [54]. For the moderation analysis, the study also found that the relationship between top management support and employee engagement was weaker when the HRM practices

were inefficient. Moreover, [43] Social Exchange Theory perspective also underscores that engagement is a two-sided affair. Thus, if a certain level of organizational support is provided to the employees, they will reciprocate with positive engagement. This is a two-way affair wherein employees are supported, which not only leads to success on an individual basis, but also to a successful government. This interconnectedness underscores the importance of nurturing organizational context to facilitate employees' engagement.

7 Study Contributions

7.1 Theoretical Contributions

The research contributes to the literature on HRM and public administration by suggesting that leadership support may have a greater influence on employee engagement than the formal HRM system in public-sector contexts. While prior research has focused on the strategic importance of the HRM system in shaping employee outcomes, the current research suggests that the effectiveness of the HRM system may depend on the quality of its implementation within the organizational context. In the case of public-sector organizations in Jordan, leadership support may have a more direct impact on employee engagement.

Furthermore, the role of the Social Exchange Theory [SET] Perspective is a critical threshold in the establishment of the relationship between employees and their organization. This framework has been influential in helping to explain and develop the concept of employee engagement, highlighting the notion that employees will respond positively to support and fair treatment from an organization through a range of positive response behaviors including commitment, as well as high levels of work engagement. Drawing upon social exchange theory, organizational engagement has been conceptualized as a result of several informal social exchanges between an organization and its employees. This theory has contributed to a better theoretical knowledge of employee engagement as an organizational behavior which can be influenced by internal practices and policies, therefore, developing a useful conceptual framework to explain and improve organizational performance in organizations especially the public sector.

7.2 Practical Contributions

Employee engagement is a key factor in organizational success, job and organization retention. Results highlight the importance of senior management support and effective HRM in stimulating engagement. Staff feel valued and engaged when leaders demonstrate that they are serious and HR policies, are fair and supportive. It creates a good place to work, generates organizational commitment, and motivates going the extra mile behavior. High levels of employee engagement also result in lower rates of turnover and absenteeism because of opportunities for career growth as well as loyalty development. At the end of the day, engaged employees result in a more performance-oriented, transparent, and collaborative work environment. This is a comprehensive approach that is required to deliver better quality social services, particularly in public sector organizations such as the Ministry of Social Development in Jordan.

7.3 Limitations and Future Studies

It is important to note that there are limitations to the research, which need to be identified. First, the research was done in one public organization, the Ministry of Social Development in Jordan. Future research may consider conducting the research in more than one public organization to make the results more generalizable. Second, the research was based on self-reported questionnaires, which may lead to common method variance. Future research may consider collecting data from more than one source to reduce the limitations of the research. Third, the research may have experienced sampling bias because the questionnaires were sent online, which may have been accessed only by employees with internet connectivity. Future research may consider collecting data through more than one source to reduce the limitations of the research. Future research may consider expanding the model by including more HRM practices such as recruitment and selection, leadership development, organizational culture, to mention a few, to have a better understanding of employee engagement in public sector organizations.

8 Conclusion and Implications

This research lends credence to [43] Blau's Social Exchange theory-based hypothesized link. Based on the findings, the Jordan Ministry of Social Development should prioritize HRM practice policies on training and development, performance

appraisal, and compensation. These matters a great deal since how government institutions handle their human resources practices is more critical for the employees and institutions, substantially affecting employees' conduct while on the job. The Ministry of Social Development [MOSD] might also hold seminars and workshops to raise employees' knowledge of HRM practices and their favorable impression of them. Similarly, HRM managers should portray employees' career trajectories by providing appropriate career development-based activities, planning support, and creating a more positive job atmosphere to inspire them to do their best. Human resources management managers could modify or develop HR regulations that consistently encourage and help employee engagement. There are several aspects that need to be considered to carry out this investigation properly. To start with, the research does not include any other ministries; it just includes the Ministry of Social Development. To make the results more applicable to a broader context, future studies should think about expanding the scope. Additionally, the cross-sectional nature of this research does not allow us to draw any conclusions about the relationship between the variables. So, it is recommended to do longitudinal research. In order to ensure that subsequent studies can confirm the accuracy of the results, as people's views and opinions may evolve with time. Finally, only three HRM practices were used in the present study. Other practices, like the recruitment and selection process, may be worthy of future investigation.

With regard to the results obtained, it is possible to suggest the following practical recommendations to the policymakers of the Ministry of Social Development: First, leadership development programs should be applied to improve the managers' potential to provide support, communication, and motivation to employees. Second, performance appraisal systems should be made more transparent to improve employees' perceptions of fairness. Third, training programs should be applied to improve employees' skills. Finally, HRM practices should be integrated with leadership programs to ensure the effective experience of HRM practices by employees at the workplace.

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APPENDIX

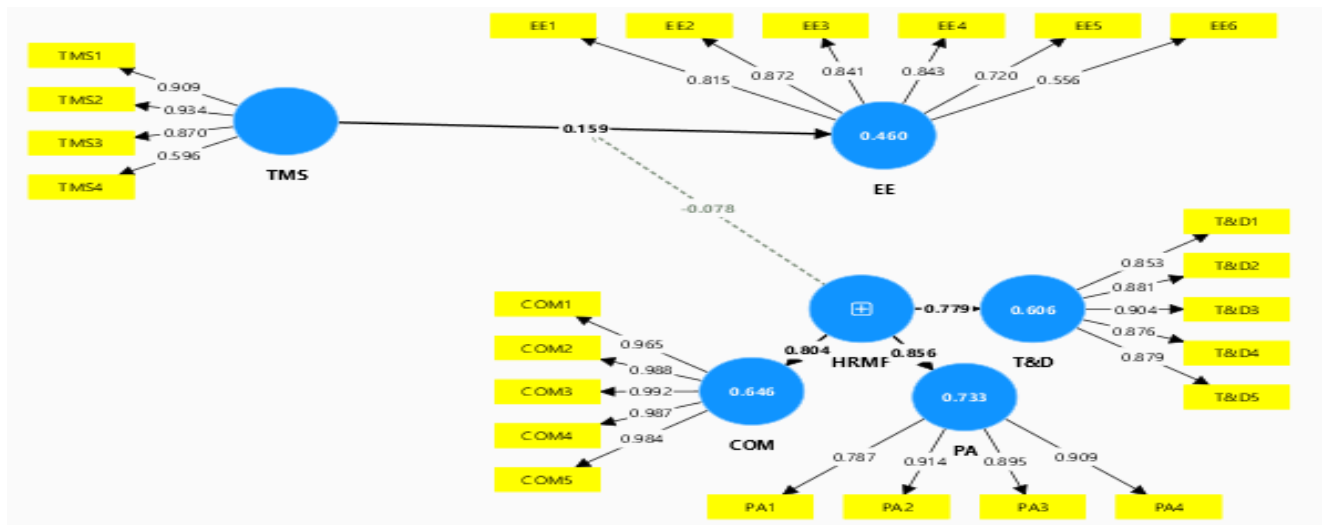


Fig. 2: Initial loading measurements model
Source: Developed by the authors based on SmartPLS4 output

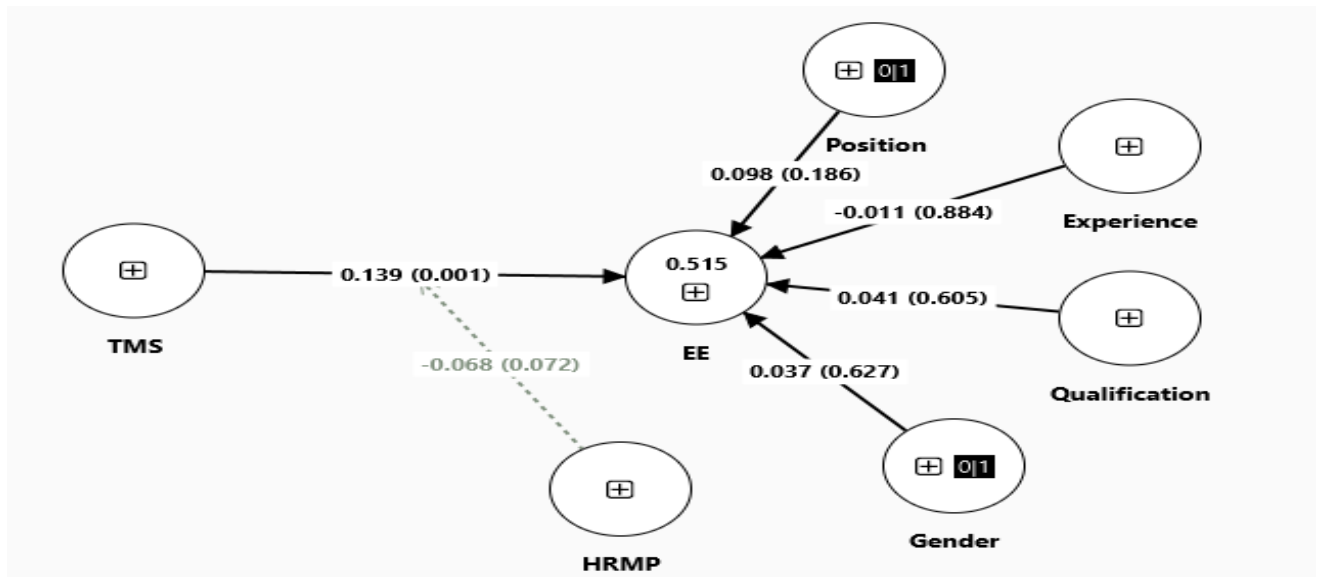


Fig. 3: Structural Model
Source: Developed by the authors based on SmartPLS4 output.

Table 4. Hypothesis testing

Hypo	Relationship	Beta	SE	T- value	P- values	LL	UL	f2	VIF
H1	TMS -> EE	0.163	0.042	3.910	0.001	0.093	0.230	0.041	1.215
H2	HRMP -> EE	0.556	0.042	13.090	0.001	0.483	0.623	0.432	1.343
H3	HRMP x TMS -> EE	-0.085	0.042	2.036	0.021	-0.154	-0.016	—	—
	experience -> EE	-0.021	0.038	0.542	0.294	-0.082	0.041	—	—
	gender -> EE	-0.117	0.077	1.519	0.064	-0.242	0.011	—	—
	position -> EE				0.229			—	—
	qualification -> EE				0.016				

Source: Authors' own analysis using SmartPLS4 based on survey data (2026).