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HUMAN RESOURCE MANAGEMENT | RESEARCH ARTICLE

Job Resources, Employee Engagement, and Innovative Work Behaviour of Bank Employees: Does Sex Matter?

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Abstract: This study examined the relationships between job resources, employee engagement, and innovative work behavior among bank employees, taking into consideration gender differences. Data were gathered from 159 bank workers in the Cape Coast metropolis using a structured questionnaire, and data analysis was carried out using Structural Equation Modelling 4.9.8. A multigroup analysis was also done to assess how different gender roles affect the relationship between job resources, employee engagement, and the innovative work behavior of bank workers. The study found that job resources did not have a direct relationship with innovative work behavior but did so indirectly through employee engagement. Furthermore, the multigroup analysis revealed that when women have access to good job resources, they feel more engaged in their work, increasing their innovative behaviors compared to men. This study addresses a knowledge vacuum in the banking industry by examining the relationships between job resources, employee engagement, and innovative work behavior. It offers empirical evidence in a context that has yet to be extensively studied.

Keywords: Job Resources, Employee Engagement, Innovative Work Behavior, Banking Industry.

JEL Classification Code: M12, J24, O31

1. INTRODUCTION

The concept of innovative human resources is gaining ground in the banking sector globally despite the introduction of several ICTs that help in efficient service delivery (YuSheng & Ibrahim, 2019). This is because scholars in the field of organizational psychology and human resource development have seen the immense contribution of human resources in attaining organizational competitiveness and excellence (Sparrow & Cooper, 2014). To react to the ever-dynamic and competitive work environment, innovative products and processes are required to enhance internal processes and outcomes for firms in the banking sector and, subsequently, maintain prosperous relationships with customers (Anderson et al., 2014). Given the pivotal role of innovations, banks need their employees to contribute to innovation processes actively. However, George and Thomas (2023) revealed that commercial banks in Egypt lose about 20% of competent and innovative employees due to poor work environment, reducing employee engagement.

Further, a study by Aderemi Adedoyin (2021) proved that commercial banks in sub-Saharan Africa, particularly Ghana and Nigeria, lose about 15% of their employees due to poor working environments and the quest for employees in search of greener pastures in Europe and the Americas. Rajapathirana and Hui (2018) recorded that innovative employees can improve organizational revenue by 18% and help increase firm performance by 11%. Thus, human resources can improve an organization's ability to compete through its innovative work behaviors. Employee innovative work behavior is defined as an employee's behavior toward problem recognition, development of ideas, mobilization of Support, and implementation of ideas connected to the initial challenge (Kwon & Kim, 2020).

A study by Contreras et al. (2017) discovered an important relationship between Innovative Work Behavior (IWB) and the survival of enterprises in changing social and economic situations. They

stressed the importance of further research into the facets, both human and organizational, that impact IWB. Similarly, Reddy and Chan (2022) argued that IWB is essential not only for innovation-centric firms or jobs but for all members of the organization. This understanding motivates researchers to concentrate their efforts on determining the prerequisites and determinants of IWB (Ali et al., 2022). Managers face a variety of hurdles when they seek to foster and nurture IWB in their workforce. These include assessing employees' readiness for innovation, resolving inequities in the workplace, and dealing with the possible barriers and differences corporate cultures impose on the general adoption of innovation-inducing activities (Tan et al., 2021). In this regard, this study contends that job resources can help employees with their IWBs. In recent years, academics and practitioners in the field of HRM and HRD have widely recognized the importance of providing employees with adequate job resources in the form of training, autonomy, and supply of resources (Msuya & Kumar, 2022). This is because providing employees with these resources helps employees to be creative and find new ways of dealing with job-related problems (Kwon & Kim, 2020). Indeed, the social exchange theory also affirms the benefits an organization would reap when adequate resources are given to employees to execute their tasks (Thakur & Kumar, 2015).

Uddin et al. (2019) argued that providing employees with job resources will increase employee engagement. Employee engagement in supporting innovative behavior is an ideal condition that is expected in the organization. Providing adequate resources to employees in the workplace is important to induce employee engagement. The presence of employee engagement is believed to foster the efficacy of employees, thereby leading to enhanced organizational effectiveness and ultimately contributing to the success of the organization. As per the research conducted by Schaufeli et al. (2002), employee engagement can be defined as a motivational factor that results in specific, fulfilling, affective-motivational, and work-related mental states. These states are characterized by enthusiasm, dedication, and absorption.

Despite some insightful studies on engagement and innovative work behavior (Koroglu & Ozmen, 2022), job resources and employee engagement (Xanthopoulou et al., 2009), and job resources and innovative work behaviors (Messmann et al., 2017), the relationship among these variables have received muted attention in the banking industry, especially in Ghana. Again, although engagement has been used as a mediator in different relationships by Abdullahi et al. (2022), Susita et al. (2021), and Yalabik et al. (2013), there is a shortage of empirical research on how job resources and employee engagement interact to affect innovative work behaviors. The potential influence of employee engagement and job resources on innovative behavior is an intriguing hypothesis that might have a substantial impact on organizational success. Despite increased interest in employee engagement from both researchers and practitioners (Shuck et al., 2011), the majority of extant material in this field comes from Western contexts, where factors such as gender can determine levels of employee engagement. For instance, women may face challenges in accessing specific job resources or experience different types of Support compared to their male counterparts (Kotera et al., 2021). This unequal distribution can impact the levels of employee engagement, affecting how they engage with their work and subsequently influencing innovative work behavior (AlEsa & Durugbo, 2022). Again, research suggests that women may tend to emphasize collaborative and team-oriented engagement, while men may exhibit more individualistic approaches. These gender-specific engagement styles can lead to distinct pathways toward innovative work behavior (AlEsa & Durugbo, 2022). Also, perceptions and expectations tied to gender can shape the way employees perceive and utilize job resources. These assumptions suggest that the relationship between job resources and their impact on innovative work needs further investigation.

According to Urbach and Ahlemann (2010), job resources allow employees to approach their tasks as they see fit and might allow employees to take on complex activities, which is important for encouraging innovation. Despite its importance, only a few research have looked into the links between job resources and innovative behavior. Furthermore, there needs to be more clarity in understanding the mechanisms that connect job resources and innovative work behavior. Based on the importance of employee engagement in the academic literature in terms of improving employee dedication, vigor, and absorption into their job physically, cognitively, and emotionally Schaufeli, (2013), the authors believe that it has the potential to strengthen the job resource relationship with innovative work behavior. Further, gender dynamics within workplaces can significantly influence the

mediation of employee engagement in the relationship between job resources and innovative work behavior. This study contributes to three important things. Firstly, this study addresses a knowledge vacuum in the banking industry by examining the relationships between job resources, employee engagement, and innovative work behavior. It offers empirical evidence in a context that has yet to be extensively studied.

Furthermore, it enhances current understanding by emphasizing the influence of gender dynamics on the utilization of resources and patterns of engagement, revealing potential disparities in how genders interact with resources and participate in work. Finally, this study provides practical implications by highlighting the significance of job resources in improving employee engagement and, as a result, promoting innovative work behavior. This offers direction for banks that are seeking to enhance their innovative capabilities.

2. LITERATURE REVIEW

2.1. *The Social Exchange Theory*

The social exchange theory was proposed by Eisenberger et al. (1986). The theory's central tenet is that employees trade their time and effort on their jobs for valuable outcomes. The theory reveals that when the organization supplies employees with job resources like resource supply, training, and autonomy to operate, employees are automatically motivated to increase their levels of engagement. Engaged employees can take advantage of their current job resources and utilize them for positive outcomes in the form of better performance through innovative idea development and new ways of accomplishing tasks (Eldor & Harpaz, 2016). Thus, employees pay attention to how organizations treat them to discern the extent to which the organization is supportive and values their contribution (Tziner & Sharoni, 2014). With a feeling of Support, employees in the banking industry will strive hard to ensure that client and customer satisfaction is attained. In other words, employees in the banking sector will strive to pay back the high level of Support they receive from the organization by increasing their efforts. This is because employees who perceive that their organization provides them with adequate resource support are more committed, loyal, and more positively oriented toward the organization and always develop new and creative ways to help achieve organizational goals. This inference is in line with a study by Chiang and Hsieh (2012), who found that when the organization provides employees with Support in the form of resource supply, such employees develop positive attitudes toward the organization. More pictorial evidence of the variables is represented in Figure 1.

2.2. *Job Resources and Innovative Work Behavior*

Innovative work behavior involves actions and behaviors by employees that contribute to the creation, development, and implementation of new ideas, processes, products, or solutions within the organization. It encompasses activities like idea generation, problem-solving, experimentation, and the willingness to think creatively and adapt to changing circumstances (Orth & Volmer, 2017). Job resources, such as supportive colleagues, access to information, and opportunities for skill development, play a vital role in fostering innovative work behavior within organizations (Stoffers et al., 2020). When employees perceive that they have the necessary resources to execute innovative ideas, they are more likely to engage in creative problem-solving, idea generation, and experimentation. This relationship is rooted in the idea that job resources provide individuals with the means and confidence to think outside the box and explore novel solutions to work-related challenges (Dediu et al., 2018). Ultimately, the presence of these resources can significantly enhance an employee's capacity for innovation, benefiting both the individual and the organization as a whole. Gender may influence how employees perceive and access job resources (Huang et al., 2019).

In some cases, there might be gender-based disparities in resource allocation, where certain resources are more readily available to one gender over the other. These disparities can affect the capacity for innovative work behavior, potentially leading to differences in idea generation and implementation between genders. Scholars (Messmann et al., 2017) have found that job resources have a significant effect on innovative work behavior. On this premise, the study hypothesis is that;

H1-job resources have a significant effect on innovative work behavior.

2.3. Job Resources and Employee Engagement

Job resources refer to the supportive factors and assets that employees have access to in the workplace (Coetzer & Rothmann, 2007). These resources can include things like social Support from colleagues and supervisors, opportunities for skill development and training, autonomy in decision-making, and access to information and tools that enable them to perform their jobs effectively. When organizations provide employees with these resources, it fosters a sense of well-being and job satisfaction. This, in turn, leads to increased commitment and enthusiasm in their roles, resulting in higher levels of engagement (Agarwal et al., 2012). Employees who feel supported, empowered, and equipped with the necessary tools are more likely to invest in their work, contributing to higher productivity and performance. Job resources are instrumental in shaping the emotional connection between employees and their work, demonstrating the direct relationship between resource availability and employee engagement (Xanthopoulou et al., 2009; Coetzer & Rothmann, 2007). Again, Samat et al. (2020) found that women may place a higher emphasis on social Support and work-life balance, while men may prioritize opportunities for career advancement. The availability and perception of these resources can differ based on gender, affecting levels of employee engagement. This study believes that;

H2: Job resources have a positive significant effect on employee engagement

2.4. Employee Engagement and Innovative Work Behavior

Employee engagement specifically refers to the level of emotional commitment, enthusiasm, and dedication that employees have toward their work, their organization's goals, and their role within the company (Delina, 2020). When employees feel supported, equipped, and empowered by these resources, they tend to exhibit higher levels of engagement. Employee engagement and innovative work behavior are interconnected constructs within the workplace (Uppathampracha & Liu, 2022). Engaged employees who feel strongly connected to their jobs and organizations are more likely to exhibit innovative work behavior. When employees are emotionally invested in their work, they tend to go the extra mile, thinking creatively, problem-solving, and seeking innovative solutions to challenges (Koroglu & Ozmen, 2022).

This engagement-driven innovation is a result of their motivation, commitment, and sense of ownership. In this way, employee engagement acts as a catalyst for innovative work behavior, creating a positive feedback loop where engaged employees are more likely to generate and implement creative ideas, ultimately benefiting the organization with increased innovation and competitiveness. The connection between these two constructs emphasizes the significance of fostering employee engagement for promoting innovation in the workplace (Koroglu & Ozmen, 2022; Vithayaporn & Ashton, 2019). According to AlEsa and Durugbo (2022), women may exhibit more inclusive innovation behaviors, while men may engage in more assertive and individualistic approaches. These gender-related differences can shape the nature and impact of innovative work behavior within the organization.

H3: Hypothesis that employee engagement has a significant effect on innovative work behavior

2.5. Mediation of Employee Engagement and The Effect of Gender

Engaged employees are more likely to be motivated, committed, and willing to go beyond their basic job responsibilities to contribute innovative ideas and solutions to the organization. In the academic literature, employee engagement is a channel through which several positive employee and organizational outcomes occur. For instance, a study by Yalabik et al. (2013) found Work engagement as a mediator between employee attitudes and outcomes. Again, Abdullahi et al. (2022) found employee engagement as a mediator in the relationship between talent management practices and employee performance. Finally, Susita et al. (2021) also found employee engagement to be a good

channel through which motivation and organizational Support can translate into employee performance. In this regard, the study proposes that job resources influence innovative work behavior not only directly but also indirectly through their impact on employee engagement. The social exchange theory, which emphasizes the norm of reciprocity, asserts that providing adequate resources in the workplace enhances engagement levels, which, in turn, fosters a conducive environment for innovation (Eisenberger et al., 1986). Thus, employees who are engaged due to the resources available are more likely to exhibit innovative behaviors, such as proposing new ideas, problem-solving creatively, and adapting to change.

Even though this might be true, the study again contends that the rate at which job resources translate into innovative work behavior through employee engagement may differ between men and women in the organization (Shuck et al., 2011). The relationship between job resources, employee engagement, and subsequent innovative work behavior might be different for men and women within an organization due to various factors (AlEssa & Durugbo, 2022). Societal norms and cultural expectations often influence how men and women perceive and interact with job resources (Van der Lippe & Lippényi, 2020). These societal influences shape individual preferences, communication styles, or approaches to engagement, potentially impacting how resources translate into engagement levels and subsequently into innovative behaviors (Hernaus et al., 2023). Moreover, organizational dynamics, leadership styles, or implicit biases might inadvertently affect how job resources are allocated or accessed by different genders (Tabassum & Nayak, 2021). Variations in resource distribution or how support systems are utilized could impact engagement levels differently for men and women (Cleveland et al., 2000). However, while there might be nuanced differences, the fundamental principles of the relationship between job resources, engagement, and innovation are likely to hold for both genders. Adequate resources tend to enhance engagement, and engaged employees are more inclined to exhibit innovative behaviors regardless of gender. Based on this, the fourth hypothesis is that;

H4: Employee engagement plays a significant mediation role in the link between job resources and innovative work behavior. Does the relationship impact gender differently?

The conceptual framework in Figure 1 shows the relationships among job resources, employee engagement, and innovative work behaviors as per the social exchange theory and hypotheses:

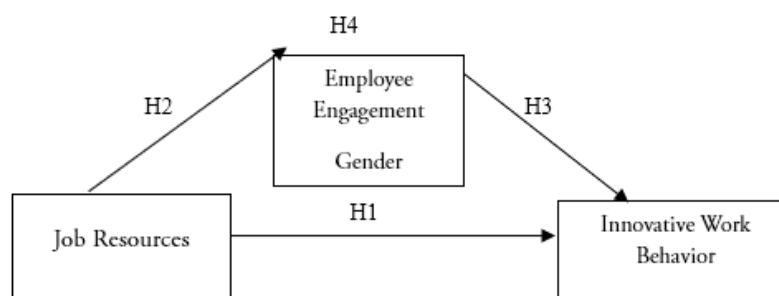


Figure 1. Conceptual Framework

3. RESEARCH METHOD AND MATERIALS

The research was carried out within the Cape Coast Metropolis, located in the Central Region of Ghana. The study focused on the commercial banks located within the metropolis. The selection of the study area was based on the recognition of the ongoing restructuring in Ghana's banking sector. Given this context, it is deemed necessary to ensure that employees in this sector are sufficiently equipped with resources to enhance their innovative work behavior. Nevertheless, the level of success that commercial banks in the Cape Coast metro can attain in this regard is still being determined. Therefore, given the growing significance of Cape Coast as an economic hub for banks, management must implement strategies aimed at enhancing employee innovativeness. The research study utilized an explanatory research design to elucidate the relationship between the variables being investigated. The explanatory design employed in this study is grounded in the fundamental principle of

establishing a cause-effect relationship between the variables under investigation. Specifically, the variables of interest in this study include job resources as the independent variable, employee engagement as the mediator, and innovative work behavior as the dependent variable.

Furthermore, the rationale for adopting a quantitative approach in this study is based on the premise that the data being analyzed are inherently quantitative. Consequently, the utilization of statistical tests is necessary to ascertain the credibility and significance of the observed relationships. The population under investigation encompasses all individuals employed by commercial banks within the Cape Coast Metropolis. According to the available data, the aggregate population of individuals employed in the banking sector was recorded as 270. The study focused exclusively on the permanent employees of the commercial bank, encompassing individuals in positions such as tellers, customer service representatives, accounting clerks, and managers. The sampling technique employed in this study was a simple random technique, which is a widely used method in research. This technique involves selecting a subset of individuals from a larger population in such a way that each individual has an equal chance of being chosen. By using this method, the researchers aimed to ensure that the sample obtained was representative of the population and that any conclusions drawn from the study could be generalized to the larger population with a certain level of confidence. The study was conducted using all banks located in the Cape Coast metropolis. The study involved a sample size of 159 individuals, which was selected from a pool of 270 employees. The sample size for this study was determined using the Krejcie and Morgan (1970) sample size determination table at a 95% confidence interval (CI).

The data collection instrument utilized in this study was a questionnaire, which was meticulously designed to align with the specific research objectives and hypotheses. To facilitate a smooth data collection process, initial contact was established with the participants. The questionnaire items utilized in this study were derived from previous empirical research conducted in the field. The job resources, including training, resource supply, and job autonomy, were derived from previous studies conducted by Scott and Bruce in 1994 and Breugh in 1985. The items about innovative work behavior and employee engagement were derived from previous studies conducted by Jansen (2003). The items from the validated scales were assessed using a 5-point Likert scale, ranging from 1 (least agreement) to 5 (strongly agree). It has been observed that the reliabilities of these scales surpass the threshold of 0.7, indicating a satisfactory level of consistency and stability in the measurements obtained from these scales. To maximize participation rates, the researcher implemented a data collection strategy that accounted for variations in respondents' availability. This involved collecting data at different intervals to accommodate the diverse range of free periods reported by the participants. Regarding this matter, a portion of the data was gathered during the morning hours, while the remaining portion was also collected during the afternoon period.

Furthermore, to optimize the response rate within a specified timeframe, a designated period of three months was allocated to collect data. The analysis employed the partial least square structural equation modeling (PLS-SEM) methodology. The Partial Least Squares Structural Equation Modelling (PLS-SEM) was selected as the analytical technique for this study due to its robust statistical power in generating precise outcomes, particularly in mediation studies. The utilization of bootstrapping procedures further enhances the accuracy of the results obtained. Therefore, it is possible to overcome the limitation presented by the data type employed in the study, thus enabling the potential for significant contributions to the existing body of literature (Beran & Violata, 2010; Fan et al., 2016; Hair et al., 2019a; Henseler et al., 2016). The analysis that was conducted employed a higher-order analytical approach.

Nevertheless, the authors exclusively included the higher-order values and figure (Figure 3) in the analysis section while relegating the lower-order information (Figure 2) to Appendix 1. Regarding this matter, the initial Partial Least Squares (PLS) model was employed to evaluate the quality criteria of the constructs utilized. Per ethical principles, the participants were duly informed about their crucial role in contributing valuable information and the intended purpose for which the information will be utilized. The participants were additionally provided with guarantees of anonymity and confidentiality and were also notified about the voluntary nature of the survey. To uphold the principles of confidentiality, anonymity, and privacy, the content of the questionnaire did not include any requests for personal identification

4. RESULTS AND DISCUSSION

4.1. Characteristics of Respondents

The present study focuses on the analyses and results obtained. This study analyzed the characteristics of the respondents to understand better the individuals who participated in the research. Various demographic factors were considered, including age and gender. The sample used in this study consisted of 90 individuals, accounting for 56.6% of the total, who identified as male.

Additionally, there were 69 individuals, making up 43.4% of the sample, who identified as female. Once more, the data about the age distribution of the participants revealed that a significant proportion of the respondents (33.6%) fell within the age range of 30-34 years. Subsequently, the demographic group consisting of individuals aged 20-24 years accounted for 21.2% of the sample population. Furthermore, the data analysis revealed that a significant proportion of the participants, specifically 18.5% and 17.1%, fell within the age brackets of 35-40 years and 25-29 years, respectively. Conversely, it has been determined that a mere fraction of the participants (specifically, 6.2% and 3.4%) belonged to the age groups of 45 years and older and 40-44 years, respectively. The workforce structure of the banking sector in Cape Coast Metropolis exhibits a notable presence of highly engaged employees, as indicated by the majority of respondents who reported being 34 years old or younger.

4.2. Measurement Model Evaluation

Indicator loading > 0.7 was used as the threshold to retain in the model, but loadings < 0.7 were retained as long as the reliability and validity of the model were not compromised (Benitez et al., 2020; Hair et al., 2019b). Regarding the construct reliability, rho_A values > 0.7 were indicative of internal consistency reliability (Wong, 2022). Also, AVE values > 0.5 were deemed acceptable for convergent validity (SHair et al., 2019). Table 1 and Fig 3 provide the results of the reliabilities and convergent validity. From the table, it is observed that all the acceptable thresholds highlighted have been met. Thus, the measurement model had indicator reliability, construct reliability, and convergent validity.

Table 1. Loadings, reliabilities, and convergent validity (Higher order)

Construct	Indicator	Loading	rho_a	AVE
Employee Engagement	E1	0.776	0.911	0.598
	E2	0.776		
	E3	0.759		
	E4	0.809		
	E5	0.767		
	E6	0.791		
	E7	0.743		
	E8	0.791		
	E9	0.744		
Innovative Work Behaviour	IWB1	0.744	0.922	0.613
	IWB2	0.750		
	IWB3	0.765		
	IWB4	0.794		
	IWB5	0.783		
	IWB6	0.826		
	IWB7	0.761		
	IWB8	0.809		
	IWB9	0.808		
Job Resources	Job Autonomy	0.838	0.930	0.540
	Resource Supply	0.870		
	Training	0.907		

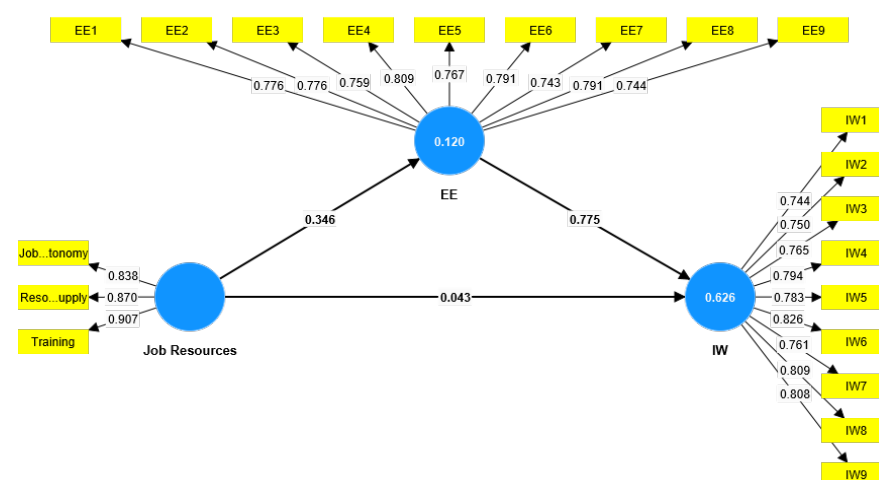


Figure 2. PLS-Algorithm Results

4.3. Discriminant Validity

According to Hair et al. (2019b), HTMT is preferred in assessing the discriminant validity of a model because of its robustness and dependability, as shown by Henseler et al. (2015). Thus, the discriminant validity of the model used in this study was assessed using HTMT, which is evident in Table 2. Using the liberal HTMT threshold of 0.9, none of the values was above this threshold. This is an indication that discriminant validity was not violated; the constructs were distinct in what they all measured, and there was no overlap in the measurement of constructs.

Table 2. Discriminant validity (HTMT0.9)

Construct	EE	IWB	JR
EE			
IW	0.843		
JR	0.393	0.348	

4.4. Results of Inner Model Analyses

This section assessed the structural model in PLS-SEM as recommended by Hair et al. (2019b) for evaluating the model's quality. This section started with the test for collinearity concerns with the help of variance inflation factors (VIF). The VIF values in Table 3 show that there are no issues of common method bias in the structural model, according to Kock (2015), as the values were below 3.3. Again, Table 3 presented the R-square values, which show the amount of variation caused by an exogenous variable on an endogenous variable. The results showed that job resources caused 62.6% variations in innovative work behavior and 12.0% variation in employee engagement, respectively.

Table 3. Multi-collinearity and R-square

Path	VIF	R-square
EE -> IW	1.136	
JR -> EE	1.000	
JR -> IW	1.135	
IW		0.626
EE		0.120

Table 4 showcases the model's out-of-sample predictive performance as employed in this study. The table highlights the model's noteworthy predictive abilities, as exemplified by the Q²predict values of the indicators, all of which surpass the threshold of 0. The model's predictive strength falls within the moderate category, per Shmueli et al.'s (2019) classification. Specifically, a model is deemed to have moderate predictive capabilities when more than half of the root mean squared error

(RMSE) values associated with PLS-SEM indicators are lower than those corresponding to the linear model (LM). A close examination of the RMSE values for PLS-SEM and RMSE LM indicates that a significant majority of RMSE PLS-SEM values are lower than LM values comparatively.

Table 4. PLS-Predict

Indicator	Q ² predict	PLS-SEM_RMSE	LM_RMSE	PLS-SEM_RMSE – LM_RMSE
EE1	0.096	0.956	0.964	-0.008
EE2	0.070	1.006	1.017	-0.011
EE3	0.063	1.022	1.033	-0.011
EE4	0.075	0.903	0.909	-0.006
EE5	0.052	1.024	1.037	-0.013
EE6	0.085	1.014	1.021	-0.007
EE7	0.040	1.127	1.134	-0.007
EE8	0.023	0.973	0.975	-0.002
EE9	0.019	1.053	1.062	-0.009
IW1	0.058	1.082	1.091	-0.009
IW2	0.046	1.093	1.099	-0.006
IW3	0.065	1.099	1.110	-0.011
IW4	0.023	1.048	1.044	0.004
IW5	0.036	1.025	1.036	-0.011
IW6	0.000	0.969	0.966	0.003
IW7	0.075	0.935	0.943	-0.008
IW8	0.028	1.006	1.019	-0.013
IW9	0.069	1.003	1.014	-0.011

Table 5 presents the results of the hypotheses' path coefficients and their respective significant levels. From Table 5, it is evident that job resource (JR) is not a positive insignificant predictor of Innovative Work Behavior (IWB) (Beta=0.043; t-stat=0.859; p=0.391; p<0.050), and this relationship fell within a CI of (-0.054 – 0.140). This finding of the study does not support hypothesis H1. Apart from this hypothesized path, the remaining three hypotheses were supported as their respective confidence intervals excluded 0.

Table 5. Path Coefficient

Hypothesized path	Path coefficient	T statistic	CILB	CLUB	P value
H1: JR-> IW	0.043	0.859	-0.054	0.140	0.391
H2: JR -> EE	0.346	4.352	0.190	0.500	0.000**
H3: EE-> IW	0.775	17.300	0.660	0.855	0.000**
H4: JR -> EE->IW	0.268	4.123	0.145	0.390	0.000**

Note: CI=Confidence interval; LB=Lower boundary; UP=Upper boundary

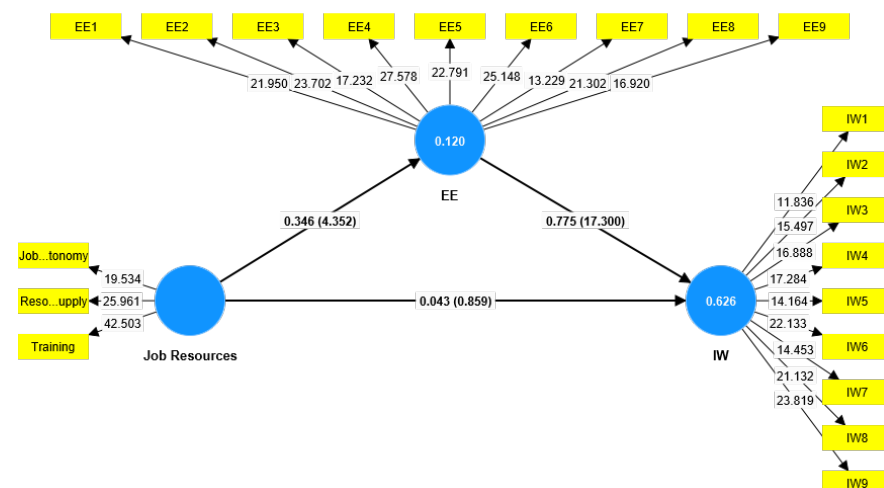


Figure 3. Bootstrap Results of Constructs

4.5. Results of Multigroup Analysis

The crucial stage of the MICOM assessment, configural invariance, was met. The indicators, sample size, data treatment, and algorithm settings for both sexes were similar. Following this, an evaluation of compositional variance was conducted, as depicted in Table 6. Upon comparing the original correlation values of the constructs with the 5.0% quantile, it was evident that these quantile values were smaller than the original correlation values across all constructs. This observation was corroborated by examining the permutation p-values of the constructs, all of which exceeded 0.05 (Cheah et al., 2020; Hair et al., 2017). This outcome leads us to conclude that, statistically, males and females appear to perceive employee engagement and innovative work behavior similarly.

Table 6. Compositional Invariance Assessment

Construct	Original correlation	Correlation permutation mean	5.0%	Permutation p-value	Compositional invariance
EE	0.999	0.999	0.998	0.355	YES
IW	0.999	0.999	0.996	0.756	Yes
JR	0.997	0.992	0.978	0.621	Yes

The results of the equality of composite mean assessment are presented in Table 7. The mean original difference for each construct is within its corresponding confidence interval, which provides evidence of mean invariance. Moreover, the permutation p-values for all constructs are more than 0.05 (Cheah et al., 2020). Hence, there is no significant difference in the mean of females and males for the constructs.

Table 7. Equality of Composite Mean Assessment

Construct	Original difference	Permutation mean difference	CI LB	CI UB	Permutation p-value	Equal mean values
JR	0.023	0.011	-0.291	0.312	0.888	YES
EE	0.102	0.008	-0.304	0.321	0.523	Yes
IWB	0.099	0.002	-0.307	0.300	0.524	Yes

Note: CI=Confidence interval; LB=Lower boundary; UP=Upper boundary

Table 8 discusses the equality of composite variance assessment results. According to Table 8, all the permutation p-values of the constructs were greater than 0.05; the constructs' original difference in variance fell within their confidence intervals. Also, the p-values were lower than 0.05. However, smaller original differences and permutation mean differences may indicate that not all the composite variances were equal, hence achieving partial measurement invariance (Cheah et al., 2020; Hair et al., 2017).

Table 8. Equality of Composite Variance Assessment

Construct	Original difference	Permutation mean difference	CI LB	CI UB	Permutation p-value	Equal variance
JR	0.032	0.007	-0.627	0.655	0.913	Yes
EE	-0.262	0.019	-0.804	0.860	0.518	Yes
IWB	0.526	0.019	-0.655	0.683	0.116	Yes

Achieving partial measurement invariance led to the bootstrap multigroup analysis presented in Table 9. The table shows no difference in the four hypothesized paths for men and women. This notwithstanding, males had a stronger beta coefficient (0.380) than females (0.335) in the effect of job resources on employee engagement. However, females had a stronger beta coefficient for employee engagement—innovative work behavior (0.790) and JR → EE → IWB (0.295) than males.

Table 9. Bootstrap multigroup analysis

Path	Male		Female		Invariant
	Coefficient	T-statistics	Coefficient	T-statistics	
H1: JR->IWB	0.038	0.637	0.040	0.686	YES
H2: JR->EE	0.380	2.491**	0.335	3.545**	YES
H3: EE->IWB	0.777	10.542**	0.790	13.967**	YES
H4: JR -> EE -> IWB	0.265	2.318**	0.295	3.499**	Yes

Per the findings of this study, it is evident that job resources had a positive but insignificant predictor of innovative work behavior (Beta=0.043; t-stat=0.859; $p=0.391$; $p>0.050$). This finding of the study does not support hypothesis H1a. The findings suggest that simply providing more resources at work may not significantly boost innovative thinking among employees. Thus, firms aiming to foster innovation might need to look beyond just offering resources and consider other factors like company culture, leadership styles, or individual traits that could have a bigger impact. This means organizations should focus on a more holistic approach, understanding that various elements influence creativity and innovation. The finding from the study is contrary to the findings of (Dediu et al., 2018; Messmann et al., 2017). The findings from the MGA bootstrap analysis revealed an interesting aspect of the relationship between job resources and innovative work behavior across genders. Despite the overall insignificance of the direct relationship, a closer examination showed a slightly stronger beta coefficient for females (0.040) compared to males (0.038). This distinction, although not statistically significant, hints at potential variations in how men and women perceive and utilize job resources for fostering innovation. Such insights highlight the existence of subtle gender-related dynamics in the workplace, possibly influenced by societal norms and stereotypes, as suggested by Huang et al. (2019). While the direct link between job resources and innovative behavior might not show distinct gender-based differences, this marginal disparity in beta coefficients implies the presence of underlying differences. These differences could stem from how certain resources are traditionally associated with or more readily provided to specific genders, impacting their effectiveness in fostering creativity and innovative thinking.

According to Huang et al. (2019), one possible factor that may account for the marginal disparity could be the existing gender roles or stereotypes prevalent in the work environment. These societal norms might influence how individuals, based on gender, perceive and interact with job resources. For instance, if certain resources are traditionally associated with or more readily provided to one gender over the other, it could affect how effectively those resources are utilized in fostering innovative behavior (Huang et al., 2019). Moreover, findings from the study hold potential benefits for both genders and the organization as a whole. For individuals, irrespective of gender, it emphasizes the significance of an enriched work environment that offers ample resources, such as resource supply, training, and autonomy, to stimulate innovative behaviors. This inclusivity in resource provision will lead to enhanced creativity and problem-solving abilities among all employees (Orth & Volmer, 2017). For the organization, it signifies the importance of implementing policies and practices that ensure equitable distribution and access to job resources across genders, contributing to a more vibrant and innovative workplace culture.

Likewise, it was found that job resource is a significant positive predictor of employees' engagement (Beta=0.346; t-stat=4.352; $p=0.000$; $p<0.050$). This finding of the study supports hypothesis H2 and is consistent with the findings of (Xanthopoulou et al., 2009; Coetzer & Rothmann, 2007). This revelation implies that for individuals, it emphasizes the crucial role of adequate resources in nurturing engagement levels. An enriched work environment, offering Support, tools, and autonomy, can significantly enhance employees' commitment and involvement in their roles, contributing to a more engaged workforce overall (Agarwal et al., 2012). Again, the results signify the importance of the management of banks ensuring equitable access to resources across genders to foster a highly engaged workforce, which is often linked to increased productivity and retention rates. This is because the MGA bootstrap analysis revealed that males had a stronger beta coefficient for job resources employee engagement (0.380) than females (0.355). The slight disparities in the results may arise from individual preferences, career aspirations, or personal inclinations (Samat et al., 2020). It is reasonable that males and females might have diverse approaches to engaging with

resources or interpreting the value of certain support systems, leading to differences in their engagement levels despite similar access to resources (Samat et al., 2020).

Similarly, the results proved that an improvement in employee engagement would improve the innovative work behavior of bank workers in the Cape Coast metropolis. This is because the results in Table 5 showed that employee engagement is a significant positive predictor of innovative work behavior of bank workers in the Cape Coast (Beta=0.775; t-stat=17.300; p=0.000; p<0.050). These results are in line with findings from (Koroglu & Ozmen, 2022 Kim & Park, 2017; Vithayaporn & Ashton, 2019). Again, the findings of the study support hypothesis H3. Also, the MGA analysis proved that males and females possess the same perception in this relationship. However, the coefficient showed that the impact is higher for females (0.790) than for males (0.777). This means that when females are engaged, they tend to be more innovative at work than males. These differences could be a result of the differing ways in which males and females perceive and express engagement within the workplace (AlEsa & Durugbo, 2022). Societal expectations or cultural norms influence how individuals of different genders engage with their work, impacting their levels of commitment, motivation, and involvement in innovative activities (Samat et al., 2020). However, a positive direction for both genders implies that the results carry significant benefits for both genders and organizational innovation. For individuals, regardless of gender, a heightened sense of engagement at work relates to a greater inclination towards innovative behaviors. This accentuates the importance of fostering an environment where employees feel deeply involved and committed to their roles, enabling them to channel that commitment into innovative contributions. Such an environment can induce both male and female employees to explore creative solutions and contribute meaningfully to the organization's innovation landscape (Orth & Volmer, 2017).

Finally, the fourth hypothesis was made to check the mediation of employee engagement in the relationship between job resources and innovative work behavior of bank workers in the Cape Coast metropolis. The results proved that employee engagement fully mediates the relationship between job resources and innovative work behavior of bank workers in the Cape Coast metropolis (Beta=0.272; t-stat=3.370; p=0.001; p<0.000). Thus, the study failed to reject hypothesis H4. Despite the lack of a direct relationship between job resources and employee engagement, the mediation analysis revealed that the impact of job resources on fostering innovative behavior operates through the pathway of employee engagement. This suggests that resources provided by the organization alone do not influence workers' innovative behavior. However, personal resources like engagement indirectly fuel the innovative work behavior of workers. This implies that the influence of job resources on innovation might be more complex than initially assumed, with engagement acting as a crucial intermediary. From a practical standpoint, this highlights the importance of focusing on strategies that not only provide organizational resources but also work towards enhancing personal employee resources, such as employee engagement, to make employees more innovative in their work roles.

The MGA bootstrap analysis showed no significant differences in the job resources –employee engagement- or innovative work behavior relationship between males and females. However, the MGA bootstrap analysis showed that females had a stronger beta coefficient (0.295) for females as compared to (0.265) for males. The results show that when workplaces provide good resources, people feel more engaged. This engagement then leads to more innovative work behavior. So, creating a work environment with ample resources can boost engagement, leading to more innovation, which is beneficial for everyone in the company. It was found that the impact on how engaged people feel at work seems to be stronger for women compared to men in selected banks in the Cape Coast metropolis. That is, when women have access to good job resources, they might feel even more involved and committed to their work compared to men in similar situations. This finding suggests that the effect of these resources on bank workers' engagement levels might have a slightly different influence based on gender. This does not mean that men do not benefit from the job resources they do, but it hints that for women, these resources might have a slightly stronger impact on how engaged they feel in their work. This disparity could be due to gender-specific predispositions towards engagement, influenced by personal experiences or societal norms, in how men and women respond to and benefit from available resources in the workplace. Furthermore, the organizational context and leadership styles might play a role. If certain resources or support systems are aligned more closely

with the preferences or communication styles of one gender over the other within the workplace, it could impact how effectively those resources are utilized to enhance engagement.

4.6. Discussion

Per the findings of this study, it is evident that job resources had a positive but insignificant predictor of innovative work behavior (Beta=0.043; t-stat=0.859; p=0.391; p>0.050). This finding of the study does not support hypothesis H1a. The findings suggest that simply providing more resources at work may not significantly boost innovative thinking among employees. Thus, firms aiming to foster innovation might need to look beyond just offering resources and consider other factors like company culture, leadership styles, or individual traits that could have a bigger impact. This means organizations should focus on a more holistic approach, understanding that various elements influence creativity and innovation. The finding from the study is contrary to the findings of (Dediu et al., 2018; Messmann et al., 2017). The findings from the MGA bootstrap analysis revealed an interesting aspect of the relationship between job resources and innovative work behavior across genders. Despite the overall insignificance of the direct relationship, a closer examination showed a slightly stronger beta coefficient for females (0.040) compared to males (0.038). This distinction, although not statistically significant, hints at potential variations in how men and women perceive and utilize job resources for fostering innovation. Such insights highlight the existence of subtle gender-related dynamics in the workplace, possibly influenced by societal norms and stereotypes, as suggested by Huang et al. (2019). While the direct link between job resources and innovative behavior might not show distinct gender-based differences, this marginal disparity in beta coefficients implies the presence of underlying differences. These differences could stem from how certain resources are traditionally associated with or more readily provided to specific genders, impacting their effectiveness in fostering creativity and innovative thinking.

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5. CONCLUSION

The findings of this study underscore the importance for organizations, especially in the banking sector, to adopt policies that promote gender sensitivity. These policies are essential for creating an inclusive, innovative and highly motivated workforce. Implementation of policies that ensure equitable access to employment resources for all genders is crucial, given the dynamic relationship between employment resources, gender disparities and innovative work behaviors. It is important to conduct regular audits of resource allocation to ensure fairness and address any gender-based disparities. In addition, promoting employee development programs that support personal and professional growth is essential. Practical suggestions for organizations include promoting flexible access to employment resources, leveraging technology to foster innovation, and establishing an inclusive organizational culture through targeted diversity and inclusion training programs. In addition, it is important to implement personalized support mechanisms, such as customized mentoring programs, to increase employee engagement and foster a culture of creativity. By strategically addressing these areas, organizations can create an environment that promotes productivity and prioritizes inclusivity and engagement, which are critical to fostering organizational innovation. This approach is not only in line with current organizational theory, but also provides a practical framework for enhancing competitive advantage in the ever-changing banking industry.

This study has examined the potentially significant factors that influence the level of employee engagement and innovative work behaviors among male and female individuals in an organizational context. The findings of this study have significant implications for leaders in organizations, practitioners, and academics. In terms of theoretical implications, this study effectively redirects researchers' focus on the important issue of employee engagement and innovative work behaviors among both genders. In addition, this study has established connections between these issues and factors that can contribute to their reduction, ultimately increasing inclusiveness. In the context of banks in the Cape Coast region, this study has utilized social exchange theory which suggests that employees exchange their time and effort on the job for valuable outcomes when the organization provides job resources such as resource supply, training, and autonomy to operate. Employees are automatically motivated to increase their level of engagement which then translates into positive employee behavior and in this context is innovative work behavior. Nonetheless, this study adds an assumption to the theory that men and women perceive this relationship in different ways. While men need resources to be innovative, women need adequate resources to be engaged in order to be innovative. Therefore, based on this premise, this study provides insights to business leaders to ensure a well-rounded approach that acknowledges and accommodates diverse preferences, enabling both genders to effectively utilize work resources through increased engagement to drive innovation in the organization. In addition, this study has made a substantial contribution to the existing literature on job resources, employee engagement, and innovative work behavior, particularly with a focus on male and female individuals. Exploring the relationship between job resources, employee engagement, and innovative work behavior among men and women is a complex task due to the need for more literature on this subject. In addition, this study introduces some previously unexplored relationships. For example, this study aimed to investigate the relationship between job resources and innovative work behaviors in men and women. In addition, we sought to explore the relationship between job resources and employee engagement, as well as the relationship between employee engagement and innovative work behaviors in men and women. By examining these variables across genders, we hope to gain a comprehensive understanding of the interaction between job resources, employee engagement, and innovative work behaviors in the workplace. In contrast to previous research, this study distinguishes itself by its originality in examining an unexplored or little-explored relationship. This study examines the role of employee engagement as a mediator and investigates the impact of engagement on gender. The findings of this study can be a valuable guideline for researchers investigating the use of employee engagement as a mediator.

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