



## Mediating Role of Employee Engagement in the Relationship Between Job Resources and Personal Resources on Turnover Intentions in Food and Beverages Manufacturing Micro and Small Enterprises in Tanzania

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### **Abstract**

This study explores the relationship between job resources and personal resources in turnover intention in the food and beverage manufacturing sector mediated by employee engagement usage of micro and small enterprises in Tanzania. The study objectives were to examine the mediating effect of employee engagement in the relationship between job resources and personal resources on turnover intention in food and beverage manufacturing MSEs in Tanzania. The positivism paradigm was adopted and quantitative research was applied. The research design used is a cross-sectional survey. A structured questionnaire was used to collect data from 2,306 population where a sample size of 387 was administered from MSEs in Dar es Salaam. The finding using a Partial Least Squares Structural Equation Model (PLS-SEM) technique revealed that job resources are positively insignificant to employee engagement whereas, personal resources are statistically positive and significantly influence employee engagement, also employee engagement is statistically positive and significantly influences turnover intention. Also, employee engagement does not indirectly affect the relationship between job resources and turnover intention while employee engagement indirectly influences personal resources on turnover intention. This study concludes that employee engagement partially mediates the personal resources on turnover intention. This study recommended that MSEs should strengthen human resource management practices that will involve developing skills, and abilities, and motivating employees to engage in the work.

**Keywords:** *Job Resources; Personal Resources; Employee Engagement; Turnover Intention; MSEs. PLS-SEM*

## Introduction

Turnover intention is a serious problem facing many organisations worldwide (Basnyat, & Clarence Lao, 2020; Kachi, Inoue, Eguchi, Kawakami, Shimazu, and Tsutsumi, 2020) and negatively affects organisations in hiring costs (Skelton, Nattress, & Dwyer, 2020). Human resource skills, knowledge, and talents are critical to the survival of manufacturing Micro-small enterprises (MSEs) (Endris & Kasseg, 2022; Ngwa et al., 2019; Sherman & Roberto, 2020). Human resources are regarded as the most valuable organisational unique resources because they help the organisation achieve its goals (Bandyopadhyay & Jadhav, 2021; Contu, 2020 Jauhari, & Yuliant, 2020; Putra, & Cho, 2019). MSEs in the manufacturing sector are having difficulty surviving the current economic climate and gaining a productivity edge over their competitors due to a high personnel turnover rate and low employee engagement (Gallup, 2022). Owing to the potential impact of human resources on an organisation's performance, engaged workers can contribute their human capital to increasing organisational efficiency and lowering the likelihood of employee turnover (Naiemaha, et al., 2019; Sun & Yoon, 2022).

Due to its impact on organisational outcomes, turnover intention, influenced by job and personal resources, is a significant area of interest for academics and human resource management practitioners (Jauhari & Yulianti, 2020; Aljohani et al., 2023; Hardaningtyas, 2020). Organisations aim to minimize employee turnover because of the high costs associated with hiring and training new staff (Babatunde & Edward, 2023) and the crucial role of human capital in retaining employees.

The Job Demand-Resources (JD-R) Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) demonstrates how both job resources and job demands influence an employee's intention to leave. According to Demerouti & Bakker, (2011), job resources such as autonomy, skill variety and performance feedback are the instruments used to assign particular tasks to employees. The job resources are provided to the employee to give the necessary resources for work to be accomplished. The relationship between employee turnover intention and job resources can be predicted and moderated by personal resources (Kotzé, 2018; Chen, 2022). The JD-R model also incorporates personal resources, establishing a connection between self-evaluation and resilience (Xanthopoulou, Bakker, Demerouti, & Schaufeli, (2009). Personal resources are psychological, physical, and social demands of a job that people must meet while carrying out their duties (Bakker, Demerouti, & Sanz-Vergel, 2023; Xanthopoulou et al., 2007; Schaufeli & Bakker, 2004). Examples of personal resources that are significant determinants of employee turnover intentions in the workplace include optimism, self-efficacy, and organizational self-esteem (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007).

Furthermore, studies have indicated that an individual's intention to quit a job is highly influenced by their employment status and personal resources (Albrecht, Green, & Marty, 2021; Kwon & Kim, 2020; Lesener, Gusy, & Wolter, 2019). Employees who exhibit enthusiasm in accomplishing organisational goals and are emotionally associated with the organisation as a result of job satisfaction are considered engaged (Otoo, 2022; Gallup, 2022).

William Kahn popularized the concept of employee engagement, originally termed personal engagement, in 1990. Since Kahn's work, the subject of employee engagement has attracted considerable interest from scholars, policymakers, and professionals in business organisational behaviour, employee development, and related areas (Aljohani, Arman, & Almaeeni, 2023; Saks, Gruman & Zhang, 2022). The importance of employee engagement stems from its ability to predict crucial organisational outcomes such as profitability, customer satisfaction, productivity, and reduced staff turnover intentions (Aljohani et al., 2023; Sarwar, Ishaq, Amin, & Ahmed, 2020). The Gallup World Place Report (2022) states that 85% of people are disengaged from their jobs globally. According to statistics, just 21% of workers in sub-Saharan Africa are engaged in their work, and 46% decide to change employment (Gallup, 2022). Additionally, the survey demonstrates that employee engagement varies according to the nature of work,

with 88% of workers in the manufacturing sector being disengaged. Furthermore, the study reveals that 37% of Sub-Saharan Africans intend to leave their current jobs (Gallup, 2022).

To understand employee engagement, the reciprocity relationship between the employer and employee was analyzed using the Social Exchange Theory (SET) (Kakar, Mansor, Saufi, 2021). According to the SET (Homans, 1958), an organisation expects its employees to reciprocate by being engaged in their work, demonstrating good performance, and having fewer intentions to leave when it gives them essential resources such as goals, policies, and philosophy (Kakar, Mansor, Saufi, Singh, 2019). When workers believe they are getting benefits from their employers via reciprocal engagement, they are socially engaged in their employment (Panda et al., 2022) and reduce their intention to quit their work (Albrecht, Green, & Marty, 2021; Kim, 2017; Aljohani et al., 2023; Sarwar, et al., 2020).

Inspired by previous empirical studies on the relationship between personal resources, job resources, and turnover intentions in Western countries, the investigators decided to research this topic within the Tanzanian environment, focusing on MSEs specifically on the manufacturing sector, particularly the food and beverage industry. Furthermore, as far as the researchers are aware, no empirical studies have been conducted in Tanzanian manufacturing MSEs, particularly in the food and beverage manufacturing sector, that use job resources and personal resources as potential predictors of turnover intentions mediated by employee engagement. This study will be the first of its kind in Tanzania, addressing this gap by exploring the relationship between these factors. Therefore, to understand this phenomenon within the manufacturing industry, a study on employee engagement is necessary. Therefore, this study looked at the mediating roles of employee engagement in the relationships between job resources, personal resources, and turnover intentions to bridge the aforementioned gap.

### ***Literature Review***

Experts and business professionals believe that employee engagement has two dimensions: energy and involvement, but they cannot agree on a single definition (Bakker, Albrecht, & Leiter, 2011). Kahn (1990) suggests that employee engagement involves members of an organization integrating their identities with their professional roles, utilizing their bodies, minds, and emotions to express and fulfil their roles. According to Schaufeli, Salanova, González-Romá, & Bakker (2002) and Schaufeli & Bakker (2010), employee engagement is defined as a positive, fulfilling mental state associated with work that is characterized by vigour (e.g., becoming highly energetic), dedication (e.g., being completely committed to work), and the absorption (e.g., being intensely focused on work). For the sake of this study, employee engagement is defined as a satisfying psychological state that is connected to the workplace and is characterized by vigour, dedication, and absorption. It inspires employees to work hard and commit to finishing tasks with a lot of energy. The three components of vigour, dedication, and absorption are the focal points of the operational definitions used in this investigation (Schaufeli et al., 2002; Schaufeli & Bakker, 2010).

Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007) define job resources as the social-psychological components of a job that promote individual growth, help achieve work-related objectives, and reduce workplace pressures and associated psychological and physiological costs. Bhatti, Hussain, and Al Dughan (2018) define job resources as the organisational, social, and material assets that support employees' professional and personal growth, enable them to achieve organisational objectives, and motivate them. Within the framework of this research, "job resources" pertain to work-related attributes that are bestowed upon employees to motivate them to assist in achieving organisational goals. The present study examines multiple characteristics of employment resources, including autonomy, skill variety, and performance feedback, as noted by Hackman and Oldham (1975) and Demerouti and Bakker (2023).

According to Xanthopoulou et al. (2007), personal resources are the views of individuals on their ability to successfully affect and control their environment. Positive self-evaluations associated with resilience that facilitate an individual's capacity to effectively manage the effects of their surroundings are known as personal resources (Hobfoll, Johnson, Ennis, & Jackson, 2003). The characteristics of persons that are used to manage their working environment are referred to as personal resources for this study. Optimism, organisational self-esteem, and self-efficacy are used in this study as personal resource components.

Lee, Choi, and Hyun (2022) define turnover intention as an employee's voluntary decision to leave their current role and stop being a part of the company. Koo, Yu, Chua, Lee, & Han, (2020) define turnover intention as an employee's behavioural propensity to leave the organisation permanently. The degree to which an employee plans to leave the company is known as turnover intention (Ma & Trigo, 2008). In the context of this study, an employee's inclination to leave the company quickly is referred to as turnover intention.

### ***Review of Supporting Theories***

The Job Demand-Resources Model was developed by Demerouti, Bakker, Nachreiner, & Schaufeli (2001) and the Social Exchange Theory (George Homans, 1958) are particularly pertinent to this research. Consequently, the JD-R model served as the study's compass and supplied the theoretical framework. SET was supplementary. The Job Demands-Resources (JD-R) Model is the main theory used in this study to describe the relationship between job resources and personal resources with turnover intention. Using this model, the effects of job and personal resources have been mapped in earlier studies (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004; Aljohani et al., 2023; Schaufeli, Shimazu, Hakanen, Salanova, & De Witte, 2019; Zeijen, et al., 2024). According to the model premise, job demands might result in employee outcomes including intention to leave the company as well as burnout. The psychological, physical, and social demands of a job are those that people must meet while carrying out their duties (Schaufeli & Bakker, 2004; Xanthopoulou et al., 2007). Contrarily, job resources are the psychological, physical, and social elements that are readily available to employees to lessen the impact of job demands and improve goal performance (Schaufeli & Bakker 2004; Vermooten et al., 2019). The approach presupposes a stronger and more constant link between job resources and employee turnover intention (Schaufeli, et al., 2019). Additionally, the JD-R model is expanded by including personal resources as an employee's means of adapting to their environment. These resources include optimism, self-efficacy, and organizationally-based self-esteem (Xanthopoulou et al., 2009). According to Schaufeli, et al., 2019, the model presupposes that personal resources positively influence turnover intention. The model is bifurcated; job resources, personal resources, and job demand comprise the left antecedents, while job performance and turnover intention are represented by the right side (Bakker & Demerouti, 2007; 2008). Using JD-R, several researchers (Chen, 2022; Le, Lee, Nielsen and Nguyen, 2022; do Carmo & Martins, 2023, Vermooten et al., 2019; Wolter et al., 2019) tested personal and job resources, as well as the effects they had. In light of the aforementioned justification, the JD-R Model provides a theoretical explanation of the impact of personal and job resources on turnover intention. This model offers a view that is comparable to the study's focus, which looks at the connection between personal and job resources and turnover intention as shown by the JD-R Model.

The Social Exchange Theory was employed in this study as an additional theory to clarify the connection between personal resources, job resources, and turnover intention. The SET explains the reciprocal links between employees and the firm. According to the notion, the process of exchange leads to social exchange. Employees participate in their work because they have access to resources and benefits from the company.

Scholars have tested the causes and effects of employee engagement using the SET as an unproven theory, Saks (2006), for instance, tested the causes and effects of employee engagement using SET. Other researchers also use SET in their empirical investigations (Kim et al., 2019). SET serves as the theoretical framework for this investigation because of its connection between employee engagement and results. When employees receive incentives and benefits from the organization they are obliged to reciprocate (Blau 1964; Hair et al. 2020; Turner, & Turner, 2020). The focus factors of this study—job resources, personal resources, employee engagement, and turnover intention—are likewise matched with SET. The Social Exchange also theory has been applied in advancing studies on the reciprocal relationship between employee and employer. Consequently, SET is the theory that underlines employee engagement. The mediating variable in this study is employee engagement which is derived from SET, which explains the reciprocity relationship between employer and employee. The theories employed above demonstrate the connection between the JD-R and SET Models in the turnover intention explained.

### Conceptual Framework

The independent variables in this study were job resources (autonomy, skill diversity, performance) and personal resources (self-esteem, self-confidence, and organizational-based self-esteem). Job resources and personal resources are two types of resources that can be used to forecast and reduce employee turnover intention. Employee engagement is a mediating factor that affects the relationship between job and personal resources on intention to leave. The dependent variable was turnover intention, employee engagement acts as a mediator. Figure 1 displays a conceptual framework that illustrates the relationships between the research variables.

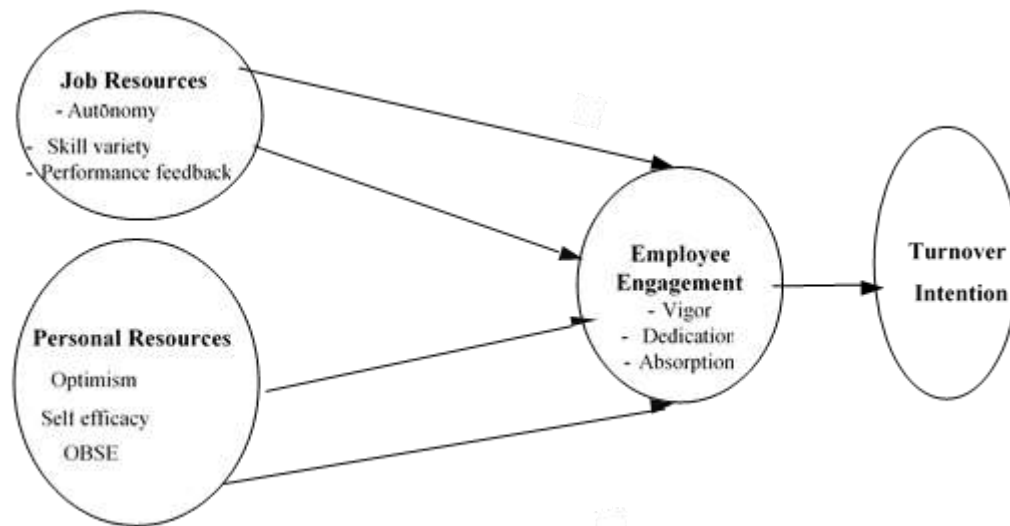


Fig.1: Conceptual Framework  
Source: Author (2024)

### Hypothesis Development

Figure 1 presents the hypothetical model graphically was developed based on the JD-R and SET theories to direct this investigation. Thus, it can be hypothesized that;

H<sub>1</sub>: Job resources have a direct positive effect on employee engagement

H<sub>2</sub>: Personal resources have a direct positive effect on employee engagement

H<sub>3</sub>: Employee engagement has a negative impact on turnover intention.

H<sub>4</sub>: Employee engagement mediates the relationship between job resources and turnover intentions.

H<sub>5</sub>: Employee engagement mediates the relationship between personal resources and turnover intentions.

### **Research Methods**

The positivist paradigm was applied in this study. The paradigm is predicated on a highly organized technique that permits the generalization of the research findings. Statistical techniques were used to test the hypothesis and analyze the data quantitatively. An explanatory research design was employed in this investigation, also a cross-sectional survey design was employed to determine whether a cause-and-effect relationship existed between the research variables (Creswell, 2012; Saunders, et al., 2009; Simon, 2011). Closed-ended questionnaires were utilized in this study to determine the association between the variables. The study area was Tanzania's Mainland and industries were taken from the Dar es Salaam region. The target population for this study consists of 2,306 employees from MSEs. Simple random sampling was used in selecting respondents from the MSEs list (Kothari, 2009; Saunders et al., 2009). Using Yamane's formula (1967), a sample size of 384 employees was chosen from various employee categories based on the target demographic from the chosen MSEs. Partial Least Squares-Structural Equation Modeling (PLS-SEM), a statistical analytic technique, was used to thoroughly analyze the survey data that were gathered. IBM SPSS version 26.0 was utilised for data analysis due to its user-friendly interface and ability to produce desired outcomes.

### **Results and Discussion**

#### **Respondent's Demographic Characteristics**

The demographic profile of the study's respondents (n=378) was created using the descriptive data collected from the targeted respondents. The results of the gender composition males are 59.3 percent while females are 40.7 percent. The majority are male which relatively outnumbers their female counterparts. Most employees in food and beverage were aged between 20 and 29 with representation at 34.1 percent followed by age between 30 and 39 at 22.8 percent. Moreover, results show that most Food and Beverages employees are educated at the secondary school level 65.9 percent. Also, results show that of most Food and Beverages employees 48.8 percent had tenures of under three years and 29.6 percent had tenures of four to five years. The produced data shows that most of the respondents were working in food processing with representation at 69.6 percent while 30.4 percent were working in the beverage sector. Moreover, results show that most of the Food and Beverages employees are paid a monthly salary, with representation at 64.6 percent, and the rest 35.4 percent are paid based on the hours they worked.

#### **Measurement Model for instrument validity and reliability**

Confirmatory Factor Analysis (CFA) was used to assess the measurement model's overall internal consistency reliability, and discriminatory and convergent validity, and to guarantee these validity (Chin, 1998; Hair et al., 2014). Before testing hypotheses, the measurement framework (outer) constructs were validated using the results of CFA. To estimate the parameters of the measurement model's constructs, a path weighting technique was employed in conjunction with a Partial Least Squares-Structural Modelling (PLS-SEM) algorithm. The latent variable is estimated using the PLS-SEM technique through correlation and regression analysis. Each latent variable in the model is identified, and the loading of the test items reveals their associations (Hair et al., 2017). The CFA findings for the assessment of the measurement

model are displayed in Table 1 where the outcomes validate the notions' validity and reliability of the construct.

### Assessment of the Reflective Constructs

Reflective constructs were evaluated by assessing the internal consistency, discriminant validity, and convergent validity (Hair et al., 2018). First, the internal consistency validity was assessed using Cronbach's Alpha ( $\alpha$ ) and Composite Reliability. Secondly, the outer loading of the indicators was used to evaluate the convergent validity; the indicators' statistical significance was found to be greater than 0.7, and the AVE value was found to be higher than 0.5. The findings presented in Figure 2 verify the convergent validity by demonstrating that all indicator loading was over the 0.7 threshold value and statistically significant with  $p < 0.001$ .

### Validity and Reliability of Instrument

The internal consistencies of the study variables were computed using Cronbach's Coefficient Alpha ( $\alpha$ ) to assess the reliability of the measurement scales. A cut-off threshold value of at least 0.700 is considered fair and reliable for changeable items (Cronbach, 1951; Nunnally and Bernstein, 1978). The measures for employee engagement, job and personal resources, and intention to leave for each research variable were retained for further examination. The variables' Cronbach's Coefficient Alpha ( $\alpha$ ) reliability ratings were considered satisfactory. The Average Variance Extracted (AVE) values for the research variables were also calculated using the formula (Fornell and Larcker, 1981) to show convergent and discriminant validity. The scales frequently have respectable reliabilities in addition to convergent and discriminant validities. Table 1 shows the construct reliabilities and validities of the employee engagement, personal resources, job resources, and turnover intention variables. All measurement items' internal reliability was ascertained, and an item analysis of every study variable was completed. To determine the reliability of the scale, Cronbach's Alpha ( $\alpha$ ) values were acquired for every measurement item. As per Brace et al. (2006) and Hair et al. (2014), item measurements for scale reliability must have acceptable values greater than 0.700. The current study also evaluated correlation items of measurement items. The measurement item with values less than 2.00 is considered to be inadequate to satisfactorily measure a specific variable (Nunnally, 1978). Consequently, the item with a lower threshold of 2.00 was recommended for deletion. Table 1 presents the results of the reliability assessment items related to study variables.

### Convergent Validity

Convergent validity was evaluated by individual indicators whereby indicators of outer loading were considered. The rule of thumb for constructing indicators of outer loadings is above 0.700 (Hair et al., 2017). All outside loading indicators were rated higher than the suggested cut-off value of 0.7, according to the data shown in Table 1, therefore, the reflective measurement model of the convergent validity was maintained. The latent variables of the reflective measurement models had Average Variance Extracted (AVE) values that were higher than the necessary value criterion of 0.500.

### Reliability for Study Constructs

The reliability study of the job resources and personal resources indicators is presented in Table 1. A reliability score was obtained for the three-item variable, according to Cronbach's Coefficient Alpha ( $\alpha$ ) reliability analysis. The reliability ratings of autonomy performance feedback and skill variety were 0.843, 0.866, and 0.790 overall. The Cronbach's Coefficient Alpha ( $\alpha$ ) reliability values for the organizational-based self-esteem, self-efficacy, and optimism variables, each with ten (10) items were 0.944, 0.983, and 0.961 respectively. Furthermore, the measures of employee engagement with three (3) components make up the variables of vigour; three (3) items make up the absorption; and three (3) items

make up dedication are reliability value of 0.973 is the overall Cronbach's Coefficient Alpha ( $\alpha$ ). Additionally, Table 1's results display the six (6) item turnover intention factors. The variables showed a reliability score of 0.856 overall for Cronbach's Coefficient Alpha ( $\alpha$ ). All demonstrated reliability scores that were above the suggested threshold of 0.700 (Brace et al., 2006; Hair et al., 2014). Additionally, item-total correlation values were used to evaluate the study's variables on job resources, personal resources, employee engagement, and turnover intention. Table 1's findings of Coefficient Alpha ( $\alpha$ ) values demonstrated high item reliabilities surpassed the acceptable recommended threshold of 0.700 (Nunnally, 1978).

Table 1: Summary of the Reflective Measurement Model Assessment- Reliability and Validity

Latent Variable		Internal Consistency Reliability		Convergent Validity
		Composite Reliability (pc) 0.60-0.90	Cronbach's Alpha ( $\alpha$ ) >0.70	AVE >0.50
Job Resources	Autonomy	0.905	0.843	0.762
	Skills Variety	0.918	0.866	0.788
	Performance Feedback	0.878	0.790	0.742
Personal resources	Optimism	0.966	0.961	0.742
	Self-efficacy	0.985	0.983	0.865
	Organizational based self-esteem	0.961	0.944	0.737
Employee engagement		0.977	0.973	0.826
Turnover intention		0.894	0.856	0.585

Source: Researcher, (2024)

### Internal Consistency Reliability

The findings in Table 2 show that the composite reliability (cp) for all constructs (job resources 0.933, personal resources 0.987 employee engagement 0.977, turnover intention 0.876) is above the recommended criterion of 0.700 (Avkiran, 2018; Nunnally, 1978). The composite reliability was confirmed, therefore, demonstrating high internal consistency of the scales.

Table 2: Composite Reliability

Construct	Composite Reliability
Job Resources	0.933
Personal resources	0.987
Employee Engagement	0.977
Turnover Intention	0.876

Source: Researcher, (2024)



### Discriminant Validity

Construct indicators with outer loadings greater than 0.7 were kept, and all outside loading indicators were rated higher than the suggested cut-off value of 0.7, maintaining the reflective measurement model's discriminant validity. Discriminant validity was obtained from indicators of job resources, personal resources, employee engagement, and turnover intentions variables due to their higher loading for each other variable.

### Fornell-Larcker's Discriminant Validity Criterion

The Fornell-Lacker criterion was used to evaluate the discriminant validity. The findings presented in Table 3 indicate that the correlation between all reflective variables as measured by the square root of AVE is stronger than that of the other construct (Hair et al., 2018).

Table 3 Fornell-Larcker's Criterion Analysis for Checking Discriminant Validity

Variables	AU	EE	OPM	PF	SEF	OBESE	SV	TI
<b>AU</b>	<b>0.873</b>							
<b>EE</b>	0.631	<b>0.909</b>						
<b>OPM</b>	0.631	0.884	<b>0.861</b>					
<b>PF</b>	0.708	0.793	0.802	<b>0.841</b>				
<b>SE</b>	0.668	0.938	0.932	0.794	<b>0.930</b>			
<b>OBSE</b>	0.628	0.931	0.861	0.757	0.921	<b>0.859</b>		
<b>SV</b>	0.678	0.843	0.874	0.771	0.872	0.825	<b>0.888</b>	
<b>TI</b>	0.362	0.649	0.578	0.471	0.656	0.674	0.569	<b>0.765</b>

Source: Researcher, (2024)

Keynote: Square root of the AVE on a diagonal

**Key:** AU = Autonomy, EE= Employee engagement, OPM = optimism PF = performance feedback SE self-efficacy, OBSE = organizational based self-esteem, SV = skill variety TI= Turnover intention

### The Heterotrait-Mono-trait Ratio (HTMT)

The discriminant validity was also assessed by PLS-SEM by using the Heterotrait-Mono-trait Ratio (HTMT) proposed by Henseler, Ringle, and Sarstedr (2015). The result in Table 4 revealed that all HTMT values were less between the threshold value of 0.85 - 0.9 (Teo, Lee, & Chai, (2008) hence the discriminant validity was confirmed.

Table 4: Heterotrait-Mono-trait Ratio (HTMT)

	AU	EE	OPM	PF	SEF	OBESE	SV	TI
<b>AU</b>								
<b>EE</b>	0.769							
<b>OPM</b>	0.775	0.802						
<b>PF</b>	0.820	0.899	0.810					
<b>SE</b>	0.836	0.849	0.843	0.895				
<b>OBSE</b>	0.841	0.847	0.881	0.859	0.841			
<b>SV</b>	0.787	0.816	0.841	0.828	0.840	0.899		
<b>TI</b>	0.410	0.748	0.637	0.580	0.725	0.761	0.659	

Source: Researcher, (2024)

**Evaluation of Structural Path Model**

The hypotheses were examined using the structural mode, the full model was run with the bootstrapping procedure. Figure 2 presents an examination of relationships of indirect and mediating. The structural model was assessed to look at how the model's prediction powers related to the research constructs (Hair et al., 2018). The path coefficients' significance and relevance, collinearities, the degree of R<sup>2</sup> values, the f<sup>2</sup> impact size, and the predictive relevance Q<sup>2</sup> value are the primary evaluation criteria (Hair et al., 2018).

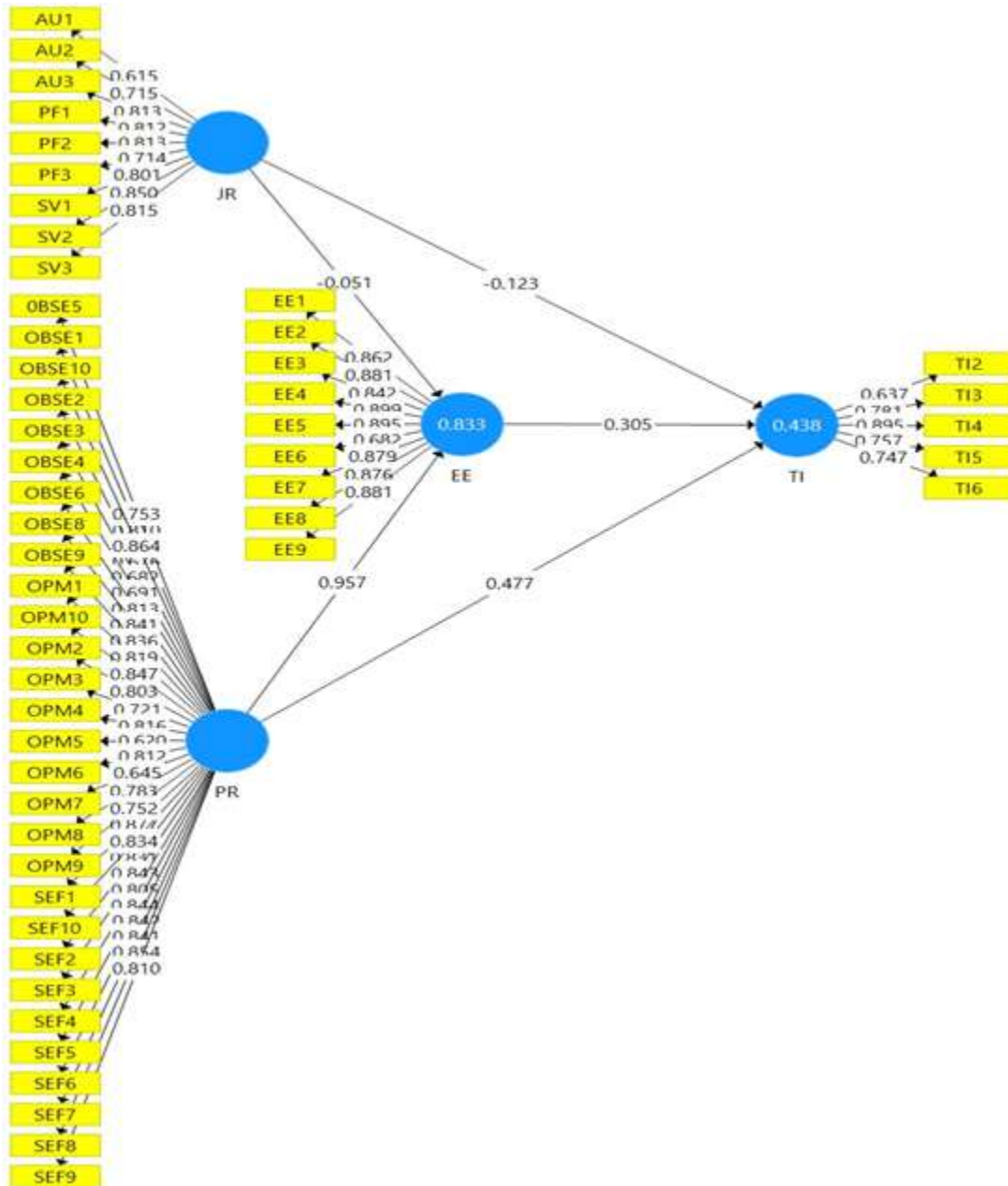


Fig. 2: Results of H<sub>1</sub> to H<sub>5</sub>

### Testing for Collinearity

A cross-sectional field survey was used to gather data for the study. Data may be biased by conventional methods due to this design, verification was thus necessary. Data analysis for the current investigation was done using PLS-SEM. If one component explains more than 50% of the variance across all variables, it is considered to be a common method bias (Podsakoff et al. 2003). Table 5 displays all of the VIF values fall below the cutoff of 5, indicating that the structural model's constructs do not have a critical collinearity problem.

Table 5: VIF Values in the Structural Model

Independent (Prediction) Variable	Dependent (Criterion) Variable	VIF
Job Resources	Turnover intention	4.861
Personal Resources	Turnover intention	4.861
Job Resources	Employee Engagement	4.674
Personal Resources	Employee Engagement	4.674
Employee Engagement	Turnover intention	<b>1.000</b>

Source: Researcher, (2024)

### Estimation of the Structural Path Coefficients

All assessed path coefficients of the structural model are statistically significant with  $p < 0.001$  as shown in Table 6.

Table 6: Structural Model Path Coefficients

Construct	Employee Engagement	Turnover intention
Job Resources	0.058	0.535
Personal Resources	0.898	0.642
Employee Engagement		0.643

Keynote: \*\*\* $p < 0.001$

Source: Researcher, (2024)

### Coefficients of Determination (R<sup>2</sup> Value)

The effect size and predictive accuracy for the estimated structural path model are measured by the coefficients of determination (R<sup>2</sup> Value), which quantify the extent to which the exogenous (independent) components explained variance in the structural model (Hair et al., 2017, 2018). The R<sup>2</sup> values range from 0 to 1, with a greater level denoting a higher predictive accuracy, according to Hair et al., 2014. For dependent variables, the suggested R<sup>2</sup> value limits are 0.190 weaker, 0.333 moderate, and 0.670 considerable (Chin, 1998, Ringle 2004). In this study, results in Table 7 show that the structural model estimated for dependent variables of employee engagement (R<sup>2</sup> Value 0.832), and turnover intention (R<sup>2</sup> Value 0.416) has predictive significant accuracy. This finding was consistent with other studies which also tested the effects of employee engagement on turnover intention (Bailey et al., 2017; Bhatnagar, 2012; Kim, 2017; Karatepe et al., 2018).

Table 7: R<sup>2</sup> Values in the Structural Model

	R <sup>2</sup>	R <sup>2</sup> Adjusted
Employee Engagement	0.832	0.831
Turnover Intention	0.416	0.414

Source: Researcher, (2024)

### Effect Size (f<sup>2</sup>)

When the exogenous construct is removed from the structural model, the effect on the endogenous construct is quantified using the effect size f<sup>2</sup> (Hair et al., 2018).

According to Cohen's (1988) recommendation, the interpretation of f<sup>2</sup> values based on thresholds of 0.02 to 0.15, 0.15 to 0.35, and above 0.35 represent the independent criterion of a small, medium, and larger effect on the dependent variable. Table 8 displays the results, which indicate that personal resources had a larger influence (0.700) and job resources had a larger effect (0.402) on turnover intention. Furthermore, employee engagement was found to be significantly impacted by personal resources (1.168) compared to job resources (0.003). Additionally, there was a greater impact of employee engagement (0.711) on the desire to leave.

Table 8: f<sup>2</sup> Effects Sizes in the Structural Model

Independent (Prediction) Variable	Dependent (Criterion) Variable	f <sup>2</sup> effect size	Interpretation
Job Resources	Employee Engagement	0.003	Small
Personal Resources	Employee Engagement	1.168	Larger
Employee Engagement	Turnover intention	0.711	Larger

Keynote: f<sup>2</sup> value <0.02 - <0.15 – small; f<sup>2</sup> value 0.15 - <0.35 – medium; and f<sup>2</sup> value >0.35 – large effect size

Source: Researcher, (2024)

### Predictive Relevance (Q<sup>2</sup> Value)

The calculated structural route model's predictive value was assessed using Stone-Geisser's Q<sup>2</sup> value (Geisser, 1974, Stone 1974). Q<sup>2</sup> values of 0.000 or less imply that there is no predictive relevance for the exogenous constructs, but values bigger than zero indicate that the exogenous constructions have predictive importance for the endogenous construct (Hair et al., 2018; Urbach and Ahlemann, 2010). The Q<sup>2</sup> value for the endogenous dimensions of employee engagement and turnover intention was calculated in this study. A technique based on cross-validation redundancy was used to compute Q<sup>2</sup> values. This method approximated the data in the measurement model's reflective dependent variables. Using independent factors that were obtained using the PLS-SEM algorithm, the data in the structural model were utilized to predict the scores of dependent variables. The results in Table 9 show that the Q<sup>2</sup> values of dependent variables of employee engagement (0.650) and turnover intention (0.226) are above zero which denotes that there is clear support for the model's predictive relevance on the endogenous latent variables.

Table 9: Q<sup>2</sup> Value in the Structural Model

Dependent (Criterion) Variable	Q <sup>2</sup> Values
Employee engagement	0.650
Turnover intention	0.226

Keynote: Q<sup>2</sup> values > 0.0 - meaningful; Q<sup>2</sup> values < 0.25 - < 0.50 – medium; Q<sup>2</sup> value > 0.5 - large predictive relevance  
Source: Researcher, (2024)

### Model Fit

The model fit assessment was done by using PLS-SEM measures such as standardized root means square residual (SRMR). The SRMR value is 0.062 which indicates a good fit as the threshold value should be less than 0.08 (Hair et al, 2018) as presented in Table 10.

Table 10 Model Fit Summary

	Saturated Model	Estimated Model
SUMMER	0.062	0.063
d_ ULS	5.264	5.425
d_ G	2.928	2.940
Chi-Square	5,567.836	5,582.063

Source: Researcher, (2024)

### The Structural Model: Hypotheses Testing

The structural model was utilized to investigate the hypotheses. The whole model was run using 5000 random samples with replacement using the bootstrapping technique. Table 11 includes the path coefficients, t-values, the corresponding significance levels, the effect size, and the confidence interval.

Table 11: Summary of the Structural Path Model

Hypotheses and corresponding paths	Path coefficients	T- statistics	f <sup>2</sup>	95% confidence interval	p- values	Decisions
JR → EE	0.051	0.858	0.003	0.066	0.391	H <sub>3</sub> not supported
PR → EE	0.957	17.666	1.158	1.061	0.000	H <sub>4</sub> supported
EE → TI	0.305	2.777	0.028	0.523	0.006	H <sub>5</sub> supported

Note: \*\*\*p<0.001      \*\*p<0.05

Note: JR= Job resources, PR= Personal resources, EE= Employee engagement, TI= Turnover intention  
Source: Researcher, (2024)

### Job Resources and Employee Engagement

The first hypothesis examined the connection between job resources and worker satisfaction. A positive correlation between job resources and employee engagement was the hypothesised link. The findings in Table 11 show that the link between job resources and employee engagement is positive and not statistically significant (t=0.858), f<sup>2</sup>=0.003 and β=0.051). The findings demonstrate that hypothesis 1 was unfounded.

## Personal Resources and Employee Engagement

The relationship between employee engagement and personal resources was examined in Hypothesis 2. It was predicted that employee engagement and personal resources would have a beneficial association. Table 11 presents findings indicating a positive and statistically significant association between personal resources and turnover intention ( $t = 17.666$ ). The findings demonstrate that hypothesis 2 was supported, with a path coefficient of 0.975 and an effect size ( $f^2$ ) of 1.158.

## Employee Engagement and Turnover Intention

The third hypothesis examined the connection between intention to leave and employee engagement. The hypothesis posited that there was an inverse correlation between the intention to leave and employee engagement. Employee engagement and turnover intention have positive and significant routes, as shown by Table 11's results ( $t = 2.777$ ,  $\beta = 0.305$ ,  $f^2 = 0.028$ ). As a result, hypothesis 3 was validated.

## Hypotheses Testing: Mediating Relationships

The structural model evaluated the effect of job and personal resources on turnover intention using employee engagement as a mediating variable. To evaluate the link between the research variables, two hypotheses were examined. Hypothesis 4 ( $H_4$ ) states that employee engagement acts as a mediator in the link between job resources as measured by autonomy, performance feedback, skill variety, and turnover intentions.

Hypothesis 5 ( $H_5$ ) states that employee engagement acts as a mediator in the interaction between personal resources as shown by organizationally-based self-esteem, self-efficacy, optimism, and turnover intentions.

Two mediation paths were used in the investigation to examine the reflected specific indirect effects in the connections that were hypothesized. These routes tested the significance threshold, confidence interval, t-values, and path coefficient. The significance levels were assessed using t-values. Specifically, at a 10% significance level ( $\alpha = 0.10$ , two-tailed test), the levels of significance are 1.65, 1.96, and 2.57, respectively, for 5%, 1%, and 5%, two-tailed tests, tests, according to Hair et al. (2017). The smartPLS application was utilized to examine the mediation to implement the bootstrap test technique (Zhao, Lynch, and Chen, 2010; Hair et al., 2018). A bootstrap approach was used to investigate the significance of the path's indirect impacts through the execution of 5000 bootstrap samples.

The findings shown in Table 12 demonstrate that there is a negligible and unimportant indirect relationship between work resources and employee engagement and turnover intention ( $\beta = -0.015$ ,  $t = 0.801$ ,  $p < 0.423$ ). Similarly, there is negative insignificance for the direct influence ( $p_3$ ) of job resources and the outcomes of turnover intention ( $\beta = -0.123$ ,  $t = 1.344$ ,  $p < 0.179$ ). The outcomes demonstrate that hypothesis 4 is unsupported.

The fifth hypothesis investigates the role that employee engagement plays in mediating the relationship between personal resources and organizationally-based self-efficacy, optimism, self-esteem, and turnover intention. Indirect mediation occurs between employee engagement and the relationship between personal resources and intention to leave. The association is substantial and positive ( $\beta = 0.292$ ,  $t = 2.772$ ,  $p < 0.006$ ). Similarly, there is a positive significant relationship between the consequences of turnover intention ( $\beta = 0.477$ ,  $t = 3.396$ ,  $p < 0.001$ ) and the direct influence ( $p_3$ ) of personal resources. The findings confirm hypothesis 5 by identifying a significant partial mediation path ( $\beta = 0.292$ ,  $t = 2.772$ ).

Table 12 Path Coefficients and Significance Levels for Mediation Hypotheses

Hypotheses and corresponding paths Direct effect (p3)	Path coefficients	T- statistics	95% confidence interval	p-values	Hypotheses and corresponding paths Indirect effect (p1.p2)	Path coefficients	T- statistics	Decisions	95% confidence interval	P values	Mediation type
JR → TI	- 0.12 3	1.34 4	0.04 9	<b>0.17 9</b>	JR →EE → TI	- 0.01 5	0.80 1	H <sub>6</sub> not supported	0.02 2	<b>0.42 3</b>	No effect mediation
PR → TI	0.47 7	3.39 6	0.75 8	<b>0.00 1</b>	PR →EE → TI	0.29 2	2.77 2	H <sub>7</sub> supported	0.50 2	<b>0.00 6</b>	Competitive partial mediation

Key note: ns = not significant, \*p < 0.10 (t > 1.65), \*\*p < 0.05 (t > 1.96), \*\*\*p < 0.001 (t > 2.57)

Complementary (Partial Mediation) (p1. p2 is significant, p3 is significant, p1. p2. p3 is positive), Competitive Partial Mediation (p1. p2 is significant, p3 is significant, p1. p2. p3 is Negative), Indirect Only Mediation (p1. p2 is significant; p3 is not significant), Direct Only Mediation (p1. p2 is not significant, p3 is significant), No Effect Mediation (p1. p2 is not significant; p3 is not significant). Zhao, Lynch, and Chen (2010).

## Discussion of the Research Results

### 1.Hypothesis 1: Job Resources on Employee Engagement

Analyzing study hypothesis one (H<sub>1</sub>)—which states that job resources have a direct positive impact on employee engagement. The results of a p-value of 0.391 is higher than the common threshold of 0.05 indicating that job resources and employee engagement have no statistically significant relationship. Also, the result of t-statistics 0.858 is below the threshold of 1.96 (for the confidence level of 95%), therefore the results of p-value and t-statistics both indicate that the relationship between job resources and employee engagement is not statistically significant. This result is against the earlier research findings (Coffie, Gyimah, Boateng, Sardiya, 2023; Bakker et al, 2008; Bakker, Albrecht and Leiter 2011; Bakker and Demerouti 2007; Bakker and Demerouti 2017) regarding the impact of job resources on employee engagement which revealed the positive relationship between job resources and employee engagement.

### 2.Hypothesis 2: Personal Resources on Employee Engagement

The relationship between employee engagement and personal resources was the focus of this hypothesis. According to the hypothesis's findings, employee engagement and personal resources are significantly and favourably correlated. The findings indicate that there is a significant. The results revealed that the p-value < 0.001 which is below the threshold of 0.001 indicates a statistically significant.

Also, the t-statistics of 17.666 is higher above the common threshold of 1.96 at a 95% confidence interval which indicates that the relationship is highly statistically significant. Moreover, there is a large effect size of 1.158 (Cohen 1988) which shows that personal resources have a strong impact on turnover intention. On the other hand, a path coefficient of 0.957 demonstrates a strong relationship between variables of personal resources and employee engagement meaning that a single unit increase of personal resources we expected to increase by 0.957 units of employee engagement. Therefore, the application of job resources in Tanzanian food and beverage micro and small businesses (MSEs) has a greater and more favourable impact on employee engagement. Based on these findings, job resources practice in food and beverage micro and small businesses (MSEs) have the potential to increase employee engagement. Furthermore, this result is in line with other research that was carried out in both Western and Far Eastern cultures (Schaufeli and Bakker, 2004; Hardaningtyas, 2020; Choi & Kang, 2012; Luthans & Peterson, 2002; Mauno et al., 2007; Xanthopoulou et al., 2007, 2009). The results also provide credence to the notion that employee engagement and personal resources are positively correlated. As the organization provide higher personal resources there will be more engaged employees. The Social Exchange Theory's (SET) justification is based on the study's findings. Personal resources are designed to increase employee engagement and decrease the likelihood of employee turnover, which is the basis for this association. According to Gouldner's (1960) Social Exchange Theory, there exists a reciprocal relationship and social exchange between employers and employees. In this relationship, employees feel motivated to contribute to the firm by exhibiting good behaviours and attitudes. This mutually beneficial relationship boosts employee engagement and improves the organization's performance.

### **3. Hypothesis 3: Employee Engagement on Turnover Intention**

The association between employee engagement and intention to leave was the focus of this hypothesis. The hypothesis's findings showed that there is a strong and positive correlation between employee engagement and the propensity to leave. The results of t-statistics of 2.77 are above the threshold of 1.96 (for the 95% confidence interval) which indicates the statistical significance. Thus, the t-value shows a strong relationship between employee engagement and turnover intention. Also, a p-value of 0.006 is below the significant threshold of 0.05 indicating statistically significant. The path coefficient ( $\beta=0.305$ ) indicates a positive relationship between employee engagement and turnover intention. The path coefficient indicates that every one-unit increase in employee engagement will reduce turnover intention by an average of 0.305 units. Despite the statistical significance, the finding of effect size ( $f^2=0.028$ ) indicates that there is a negligible relationship between employee engagement and the intention to leave. Additionally, this finding aligns with earlier research conducted in both Western and Far Eastern contexts (Agarwal et al., 2012; Baharoma, 2017; Bailey et al., 2017; Bhatnagar, 2012; Kim, 2017; Karatepe et al., 2018; McCarthy, Moonesinghe, & Dean, 2020; Saks, 2006), which discovered a strong, statistically significant, negative relationship between employee engagement and intention to leave. Furthermore, according to Bakker et al. (2006), Xanthopoulou et al. (2009), and Halbesleben & Wheeler (2008), employees who exhibit high levels of engagement at work are less likely to have lower turnover intentions. These findings, therefore, corroborate previous studies on the effects of employee engagement on turnover intentions.

### **4. Hypothesis 4: The Mediating Role of Employee Engagement on Job Resources with Turnover Intention**

The hypothesis ( $H_4$ ) is that employee engagement mediates the relationship between job resources and turnover intentions. The findings demonstrated a weak and negative correlation between job resources and the intention to leave an organization among engaged employees. Indirect impacts of work resource variables were not found to be statistically significant ( $t= 0.801$ ; p-value 0.423), leading to the rejection of hypothesis 4. The p-value of 0.423 is higher than the required threshold of 0.05 indicating that the mediating relationship between job resources and turnover intention is not statistically significant,



meaning that the result does not provide strong evidence of this relationship. Furthermore, the t-statistics of 0.801 is below the threshold of 1.96 (95% confidence interval) indicating not statistically significant. The path coefficient of -0.015 reveals a weak negative relationship. The results suggested that no ancillary effects of employee engagement of job resources on turnover intention. Additionally, the results show that job resources alone, without integrating employee engagement, can result in the intention to leave. The findings contradict those of other earlier research (Chen, 2019; Kim, 2017; Otoo, 2024) that suggested employee engagement influences the association between job resources and intention to leave.

### **5. Hypothesis 5: The Mediating Role of Employee Engagement on Personal Resources with Turnover Intention**

Hypothesis (H<sub>5</sub>), claims that employee engagement mediates the relationship between personal resources and turnover intentions. The association between personal resources and turnover intention is somewhat mediated, according to the results, by employee engagement (p-value 0.006, t= 2.772). The p-value of 0.006 is below the threshold of 0.005 indicating statistically significant supporting the hypothetical relationship of the study variables. Also, the t-statistic of 2.772 is greater than the threshold of 1.96 (95% confidence level) providing real strong evidence of the relationship of study variables. Therefore, the p-value and t-statistics indicate the statistical significance of the mediating relationship between personal resources and turnover intention. This outcome is consistent with the findings of Kim (2017), Aljohani, Arman, & Almaeeni, (2023), and Airila et al. (2014). The relationship demonstrates that when workers believe their employer is investing in helping them reach their potential, they are obligated to put in more effort at work, which lowers their desire to quit. The Social Exchange Theory, which holds that personal resources are designed to increase employee engagement and lower the intention of turnover, provided support for the study's findings. The Social Exchange Theory states that employees feel obligated to reciprocate when their employers help them (Gouldner 1960). Relationship reciprocity boosts employee engagement and lowers the likelihood of employee turnover.

### **Conclusion**

The results of this study conclude that the association between job resources and personal resource turnover intentions was somewhat mediated by employee engagement. Engaged workers will be less likely to want to quit the company in search of other employment alternatives, and they will be able and eager to contribute to the performance of the firm. The study comes to the conclusion that employee engagement and personal resources are positively and significantly correlated. Also, employee engagement significantly and positively affects the propensity to leave. Furthermore, the relationship between work resources and turnover intention is mediated by employee engagement, which is both negative and negligible. The study concludes that the association between personal resources and turnover intention is positively and significantly mediated by employee engagement.

### **Implication of Findings to the Policy and Practices**

The findings of this study offer insights for owner-managers on how to provide essential personal resources that can impact employee engagement. The results suggest that owner-managers of MSEs should focus on enhancing job and personal resources to reduce employee turnover and increase engagement because engaged employees are more likely to contribute positively to organizational performance. On the other hand, a positive relationship between employees and employers can reduce turnover in the organisation. Thus, employee engagement will be improved based on the study findings. Moreover, employee engagement has mutual impacts on employees and employers which lead to a “win-win” situation. Private organizations should emphasise strengthening human resource management practices which will involve developing skills, and abilities, and motivating employees. Moreover, this

study informed the researcher and human resource practitioners to apply the study findings to influence employee engagement.

### ***Limitations of the Study***

While this study did not have major limitations, several issues were noted. First, the study was limited by the small number of variables considered, focusing only on job resources, personal resources, and employee engagement. Second, the data was collected in micro and small enterprises and excluded medium and larger enterprises which limited generalisation of the findings in MSMEs.

### ***Recommendations Areas for Further Studies***

It is recommended that future research use a longitudinal approach, which would allow for a more detailed understanding of how job and personal resources affect turnover intentions through employee engagement. This design would help establish causal inferences among the study variables. Moderating characteristics including age, gender, and education could be incorporated into future research to broaden the scope of the investigation. Investigating the impact of these factors on turnover intentions may yield further information. It is recommended that to better investigate the relationship between job individual resources and turnover intentions, future studies take into account and look into potential alternative mediators. This could improve our comprehension of the relevant mediation processes. Furthermore, a mixed-method approach could be useful in future studies to examine the relationship between job and personal resources and turnover intentions. Although the present study employed a positivist technique to investigate theoretical hypotheses and connections across variables, the integration of qualitative methodologies may offer a more profound comprehension of how job and personal resources influence employee engagement and turnover intentions.

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