

ENHANCING ACCURACY IN STATISTICS: EXAMINING WORK AND PERFORMANCE IN INDONESIA'S BPS

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Abstract

This study delves into the effects of resilience, job resources, and job demands on the performance of BPS's statistical partners mediated by work engagement. The research uses a quantitative method with inferential analysis followed by a cluster sampling method from the questionnaire population of the statistical partner of the Central Statistic Agency (BPS) at the Mandailing Natal district of South Tapanuli in the year 2023. Results show that there is no positive relationship between resilience and performance. Resilience and job resources have a positive and significant effect on work engagement. Job resources and job demand have a positive and significant effect on performance. No positive relationship between resilience and performance. Job demand and work engagement also have no positive relationship. Work engagement mediates the relationship between job resources and performance but does not mediate the relationship between job demand and performance.

Keywords

Central Statistics Agency (BPS), Job Resources, Performance Analysis, Quantitative Research Resilience, Work Engagement.



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INTRODUCTION

Human resource management faces many challenges. When someone enters the workforce in an organization, they are confronted with key tasks, job demands, and the level of recognition they will receive for their efforts. Furthermore, the organization will evaluate the execution of these tasks to determine the compensation earned. In practice, however, the implementation of key tasks often does not fully encompass all responsibilities within the organization, as noted by Schaufeli & Bakker (2004) and Rahman et al. (2023). Human resources are the key factor in ensuring a company's efficiency, especially in the midst of the disruption era and the challenges posed by the COVID-19 pandemic, which have made investments and business sustainability more challenging (Mufraini et al., 2021; Mirfaqoh et al., 2023).

The Central Statistics Agency (BPS) of Indonesia, guided by its mission to provide quality statistics for the nation's progress, plays a crucial role in data collection and dissemination. According to Badan Pusat Statistik Indonesia (2023), as stipulated by Law Number 16 of 1997, BPS's functions include generating data from censuses and surveys for government and public use, supporting statistical activities across various institutions, developing statistical standards and education, also fostering international collaborations to enhance Indonesian statistics. In addition to enhancing the capabilities of its civil servants, BPS is broadening its workforce and extending its network to include vital statistical partners. These partners are crucial for conducting surveys and censuses and boosting productivity. Despite the limited number of staff at BPS, these statistical partners play an indispensable role in the agency's data collection and processing efforts, underlining their strategic importance in BPS operations (Bairizki, 2020; Supriyanto & Hana, 2020).

The concept of work engagement, elucidated by Bakker et al. (2023), plays a critical role in shaping organizational performance. Defined as a positive attitude towards work characterized by vigor, dedication, and absorption, work engagement promotes a sense of enthusiasm and satisfaction that transforms the workplace experience, making tasks more pleasurable (Schaufeli & Bakker, 2004). This study explores the influence of Job resources, personal resources, and job demands.

Job resources are critical elements that foster positive outcomes in the workplace, including peer and supervisor support and recognition of performance. These resources are essential for creating an engaging work environment that promotes employee resilience and beneficial outcomes, aligning with sustainable human resource management practices that emphasize common good values (Lu et al., 2023).

Personal Resources include Individual traits such as optimism and self-efficacy, which are crucial for navigating workplace challenges and significantly influence work engagement (Luthans & Jensen, 2002). Job demands, which are one of these elements, profoundly shape work engagement and, in turn, impact performance outcomes (Demerouti et al., 2001).

Previous studies have highlighted the complex relationship between these factors and work engagement. For example, Schaufeli and Bakker (2004) observed that employees with high engagement levels exhibit positive energy and enthusiasm, which enhances workplace performance. Engelbrecht (2005) noted that Danish midwives with high work engagement maintain positive attitudes and motivation even under challenging conditions.

This research, conducted together with statistical partners in South Tapanuli and Mandailing Natal Regencies of North Sumatra Province to explore: (1) The impact of personal resources on the performance of statistical partners, mediated by work engagement (Schaufeli & Bakker, 2004); (2) How job resources influence performance through the lens of work engagement (Lu et al., 2023); (3) The role of job demands on the performance of statistical partners, considering the mediating effect of work engagement (Demerouti et al., 2001).

Additionally, this study delves into human resource dynamics during and after post-remote work challenges, emphasizing the importance of work engagement and performance in the post-pandemic era (Yusriani et al., 2023). As remote work becomes more prevalent, understanding these dynamics within virtual workspaces is crucial for assessing their impact on organizational perceptions and strategies for effective remote work (Ketaren et al., 2023). This investigation aims not only to enrich the existing literature on work engagement and performance but also to provide insights into integrating work practices as a collective solution for the evolving workplace landscape. Job Demand Resource Theory posits that work engagement is influenced by personal resources, job resources, and job demands. Individuals with high work engagement will exhibit enthusiasm, energy, dedication, and immersion in their work (Bakker et al., 2023)

Schaufeli and Bakker (2004) define work engagement as a positive and fulfilling mindset toward work characterized by vigor, dedication, and absorption. Vigor is marked by high energy and mental resilience, dedication refers to being highly involved and enthusiastic about work, and absorption means being fully concentrated and joyfully immersed in work. Work engagement includes three components: psychological meaning, psychological safety, and psychological availability. Psychological meaning refers to how employees perceive the return on their investment

of physical, cognitive, and emotional energy in performing their work roles (Kahn, 1990).

Job resources fulfill basic human needs and play a role in intrinsic motivation by encouraging learning and development, or extrinsic motivation when they are critical in achieving work goals (Schaufeli & Bakker, 2004). These resources may come from the organization, workplace social relationships, procedures, and the task itself Herbert (2011), including social support, growth opportunities, organizational support, job security, and chances for advancement (Rothmann & Jordaen, 2006; Coetzer & Rothmann, 2007). Parker & Hyett 2011 identified several job resources that affect employee well-being, such as organizational respect and employer consideration.

Personal resources are positive self-evaluations related to resilience and an individual's belief in their ability to successfully control and impact their environment (Hobfoll et al., 2003). These positive self-evaluations are predictors of goal setting, motivation, performance, job and life satisfaction, career ambition, and other desired outcomes (Judge et al., 2005). Job demands are described by Bakker et al. (2023) as the aspects of a job based on workload. These demands encompass physical, psychological, social, or organizational job aspects that require sustained physical and psychological effort and are linked to specific costs (Bakker & Demerouti, 2008).

Based on previous research findings, Diah (2021) researched about the impact of work stress and work environment on work engagement and its effect on employee work ethic at PT. Pos Indonesia Jakarta Utara. The study utilized a quantitative associative method with a survey questionnaire approach. Results indicated that work stress negatively impacts employee work engagement by -6.3%, while the work environment positively affects employee work engagement by 95.5%; work stress negatively impacts employee work ethic by -2.8%; the work environment positively influences employee work ethic by 27.4%; work engagement positively affects employee work ethic by 72.2%.

Sawang (2012) investigated the relationship between job demands and work engagement. The aim was to explore a possible U-shaped relationship between job demands and work engagement and whether social support moderates this relationship. Using a survey of 307 IT managers, multiple regression was employed to test the relationships. Findings supported the quadratic effect of job demands on employee engagement, with only supervisor support, not colleague support, moderating the job demands-work engagement relationship.

(Al Badi et al., 2023) Studied the relationship between work engagement and performance

among healthcare sector employees. Aiming to enhance performance in the UAE healthcare sector, this research explored job characteristics and organizational factors affecting work engagement and nurse performance. The study, which surveyed 2,369 nurses, found that performance remains unaffected by job demands, regardless of demographics, offering a surprising insight: nurses provide quality service and complete tasks at any level of demand. Justice moderated the relationship between job resources and work engagement, a novel addition to the literature.

Gupta et al., (2024) researched the relationship between job security and work engagement. Surveying 363 software developers in India, structural equation modeling tested the proposed measurement and structural models. Results confirmed the hypothesized roles and the mediating effect of work engagement between antecedents and studied consequences.

Osei et al. (2022) examined the impact of abrasive supervision on work engagement in the healthcare field. This study aimed to test the effect of abrasive leadership on employee work engagement and further explored the interactive effects of abrasive leader supervision and employee proactive personality on work engagement through employee silence. Data from 343 healthcare workers across five hospitals in Ghana revealed that abrasive leadership adversely affects employee work engagement.

Rabiul et al. (2023) tested the mediating effect of leader communication competence in the relationship between leadership styles (i.e., servant and transactional) and employee work engagement. Survey data from 392 employees across 33 hotels in Bangladesh were analyzed using structural equation modeling and partial least squares (PLS) analysis. Results showed that leader communication competence and servant leadership positively influence employee work engagement, highlighting communication competence as a crucial tool for servant but not transactional leadership in enhancing employee work engagement.

Kotze (2018) researched how job and personal resources affect work engagement and burnout. Data from 407 full-time employees across various public and private sector organizations were collected using questionnaires on PsyCap, Utrecht Work Engagement Scales, the Maslach Burnout Inventory, and a questionnaire measuring job resources (Parker & Hyett, 2011). Variance-based structural equation modeling (SmartPLS3) was used for analysis. Findings indicated that employee satisfaction with job resources has a statistically significant negative effect on both dimensions of burnout (emotional exhaustion and cynicism) and a positive significant effect on both dimensions of work engagement (vigor and dedication). Psychological capital (PsyCap) had a

significant positive effect on satisfaction with job resources. Satisfaction with job resources partially mediated the influence of PsyCap on emotional exhaustion and cynicism and partially on vigor and dedication.

METHOD

Based on the preceding discussion, a research model was constructed to be examined, as illustrated by the following figure:

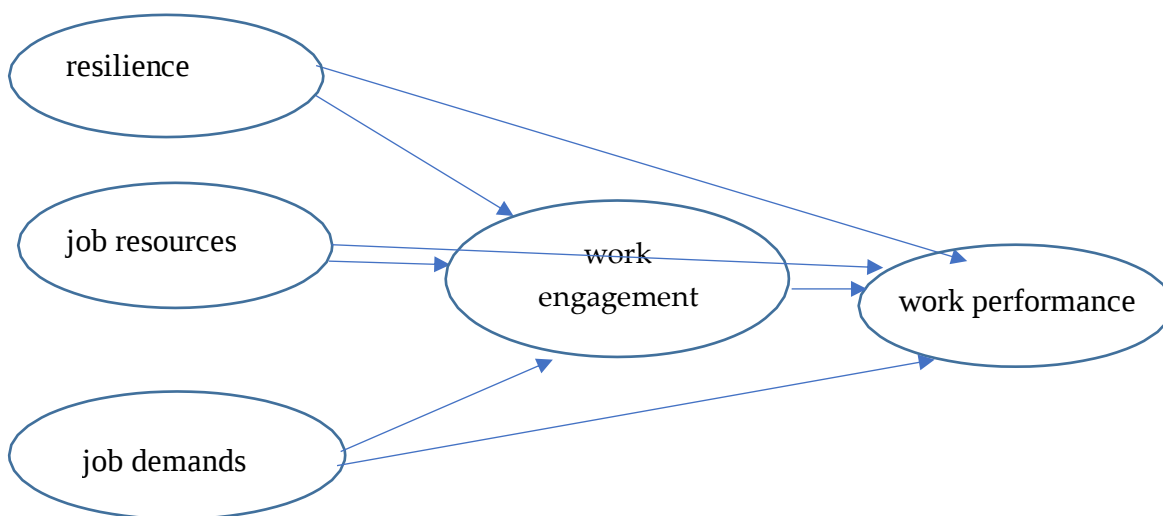


Figure 1. Research Model

Hypotheses to be tested are:

The Relationship Between Resilience and Performance

H1: Resilience affects the performance of statistical partners.

H2: Resilience affects the performance of statistical partners through the work engagement variable.

The Relationship Between Job Resources and Performance

H3: Job resources influence the performance of statistical partners.

H4: Job resources influence the performance of statistical partners through the work engagement variable.

The Relationship Between Job Demand and Performance

H5: Job demand influences the performance of statistical partners.

H6: Job demand influences the performance of statistical partners through the work engagement variable.

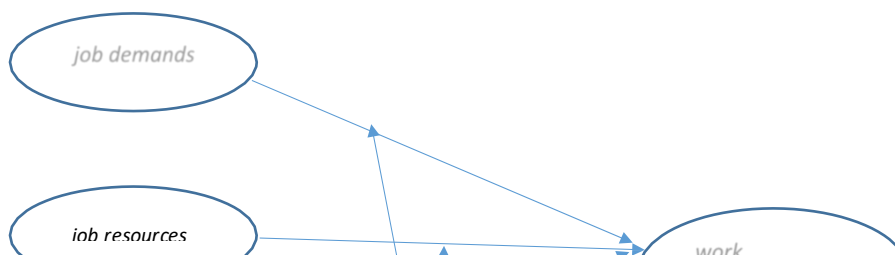


Figure 2. Research Model

The Relationship Between Job Engagement and Performance

H7: Job engagement influences the performance of statistical partners

Research Conceptual Model

The research model was developed based on the variables used in this study, as depicted in the following path diagram:

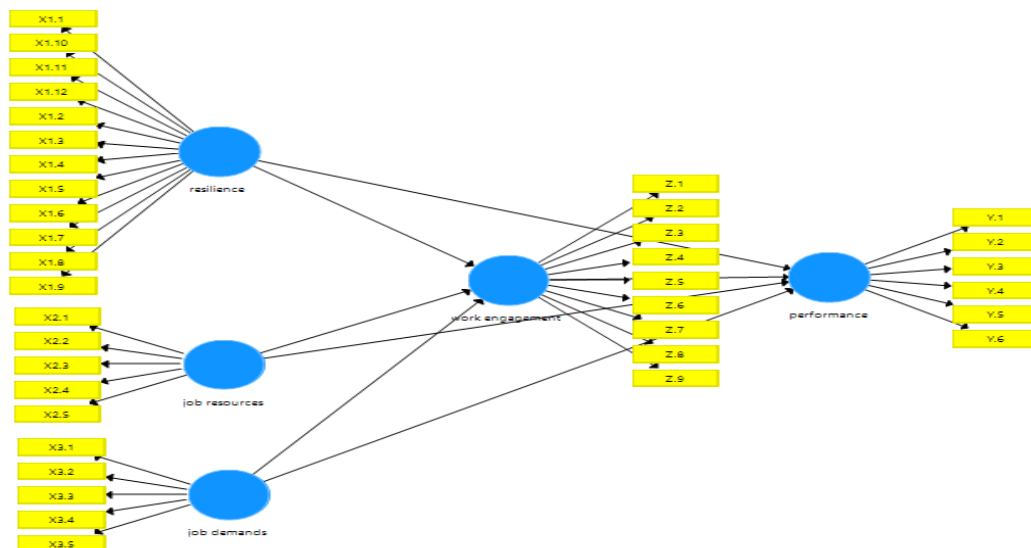


Figure 3. Research Conceptual Model

In this study, we used quantitative methods. The analysis method used is inferential analysis

by testing the hypothesis based on the results of data collection in the previous research stated by (Cresswell & Cresswell, 2009; Yusriani et al., 2024). Scholars have used the source of information to collect primary data using questionnaires (Cresswell & Cresswell, 2009; Chin, 1998; Hair et al., 2014).

The population in this study consisted of all statistical partners involved and incorporated within the scope of work of The Central Statistics Agency (Badan Pusat Statistik - BPS) in the district of South Tapanuli during the year 2023. Samples were taken from the population using the cluster sampling method. In this research, the population refers to the sub-districts where the statistical partners are assigned. The survey sample included 240 respondents out of a population of approximately 650 employees in this unit of analysis (Cresswell & Cresswell J. D., 2009; Chin, 1998; Hair et al., 2014).

The population for this research consisted of 813 statistical partners from BPS Mandailing Natal and South Tapanuli. A total sample of 240 respondents was selected. The sampling used a probability sampling technique, ensuring that each member of the population had an equal chance of being chosen. Data were collected using a questionnaire between October and December 2023. Each question in the questionnaire was rated on a Likert scale ranging from 1 to 5, where "1" means strongly disagree, "2" means disagree, "3" means somewhat agree, "4" means agree, and "5" means strongly agree.

The instrument used in this research was a questionnaire, which was created using Google Forms and distributed to the target respondents. The aim of using Google Forms is to be more effective and efficient. Cooper & Schindler (2014) instruments were collected for a few months of research; this research was conducted from August 27, 2023, until March 31, 2024.

Before processing the data from the data collection, first, the validity and reliability of the data were tested to see how appropriate the variables used in the study were (Hair et al., 2014)

A study can be said to be valid if it is able to provide results on what we really want to measure. In other words, the results of valid research will answer what is questioned in the research itself (Chin, 1998). A reliability test is conducted to see the extent of the consistency of the results of a study when carried out repeatedly. The higher the level of reliability, the more reliable the research. Validity and reliability tests will be carried out with SPSS statistics software (Yusriani et al., 2024 and Hair et al., 2014).

Data Analysis Method, to verify the research hypothesis, a statistical test will be conducted.

The statistical tool used is path analysis. Path analysis can be used to determine direct and indirect relationships, one of which is through intervening variables (Cresswell & Cresswell, 2009; Chin, 1998; Hair et al., 2014)

Path analysis is an analysis developed from multiple linear regression. This technique is used to see and prove the amount of influence (contribution) indicated by the path coefficient on each path diagram of the causal relationship between variables, for example, variables X_1 and X_2 on Y and their impact on Z . X_1 is resilience, X_2 is job resources, X_3 is job demand, Y is performance, and Z is work engagement.

The path analysis model in the figure above, when translated into a regression equation, is two regression equations combined into one research model. The two equations are written as follows:

1. $Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e_1$
2. $Z = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 Y + e_2$

The model to be built is to observe the relationship between job resources, personal resources, job demands, and its relationship to work engagement.

Furthermore, the relationship between work engagement and performance is standardized as follows:

1. $ZY = P_{1Z}X_1 + P_{2Z}X_2 + P_{3Z}X_3 + e$
2. $ZZ = P_{1Z}X_1 + P_{2Z}X_2 + P_{3Z}X_3 + P_{2ZY} + e$

Standardized value with the following formulation:

The path coefficient category indicators are as follows:

Path coefficient Power / Influence

0.05 - 0.09 Weak

0.10 - 0.29 Medium

≥ 0.30 Strong

The magnitude of the percentage of influence of each exogenous variable on endogenous is the square of the regression coefficient with the variable standardized or the square of the path coefficient. This amount is often used to determine the analysis of the effect of exogenous variables on endogenous. The value of the amount of influence can also be determined by looking at the path coefficient in the standardized model.

The coefficient of determination is seen by looking at the interpretation value. In the path

analysis output image, usually by default, the error term value or the amount of influence from outside the model will appear. The interpretation of the coefficient of determination (R^2) in path analysis is generally the same as the interpretation of the regression analysis model. Path analysis and its tests will be carried out by utilizing smartPLS software.

Operational Definition:

Resilience: The resilience scale, developed by Friborg et al. (2003), measures individuals' protective resilience elements (Smith-Osborne & Whitehill Bolton, 2013). It includes assertions such as: "I believe in my own abilities," "Believing in myself helps me overcome difficult times," and "No matter what happens, I always find a solution." Other items include confidence in problem-solving, increased self-efficacy, future outlook, self-satisfaction, learning enthusiasm, and realistic planning (Yusriani et al., 2023).

Job Demands: As outlined by Inoue et al. (2014), job demands include: "My job requires me to work hard," "My work is under time pressure," "I feel my work is overloaded," "My work is emotionally draining," and "My work creates an imbalance in my personal life."

Job Resources: Also following the findings of Inoue et al. (2014), job resources are defined as support from supervisors, a cooperative work environment, fair job assessments, appropriate income, and career development opportunities.

Work Engagement: Measured using the Utrecht Work Engagement Scale (UWES) by Schaufeli et al. (2006), this includes feelings of energy at work, morning enthusiasm, pride in one's work, inspiration, and happiness during intense work.

Work Performance: According to Furculița (2023), work performance encompasses carrying out duties as per roles, adhering to SOPs, aligning team achievements with work targets, managing work schedules effectively, and readiness for sudden assignments from leadership.

Outer Model Analysis

Convergent validity tests assess the outer loading values or the average variance extracted (AVE). An indicator is considered valid if its outer loading value exceeds 0.700. During the initial model formation phase, not all indicators achieved an outer loading of >0.700 . Therefore, indicators with values less than 0.700 were excluded from the model. The final model, displayed in the subsequent figure, includes all indicators with outer loading values greater than 0.700.

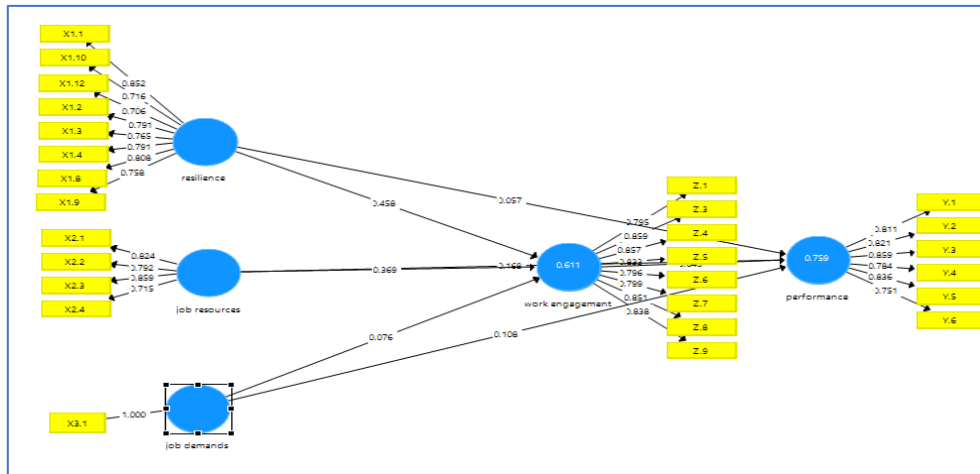


Figure 3. The Final Graphical Output data processed in 2024

FINDINGS AND DISCUSSION

Findings

Respondent Profile

The study's respondents consisted of 62.08% males and 37.92% females. Regarding age distribution, 20.42% were 25 years old or younger, 21.67% were between 26 and 30 years old, 21.25% were between 31 and 35 years old, 18.75% were between 36 and 40 years old, and 17.92% were over 40 years old. In terms of education, 51.67% had a high school diploma or equivalent, 7.50% had a diploma from community colleges (Diploma I/II/III), and 40.83% held a bachelor's degree.

Table 1. Outer Loading Value

Variable	Indicator	Loading Factor	Rule of Thumb	Result
Resilience (X₁)	X1.1	0.852	0.700	Valid
	X1.2	0.791	0.700	Valid
	X1.3	0.765	0.700	Valid
	X1.4	0.791	0.700	Valid
	X1.8	0.808	0.700	Valid
	X1.9	0.758	0.700	Valid
	X1.10	0.716	0.700	Valid
	X1.12	0.706	0.700	Valid
Job Resources (X₂)	X2.1	0.824	0.700	Valid
	X2.2	0.792	0.700	Valid
	X2.3	0.859	0.700	Valid
	X2.4	0.715	0.700	Valid
Job demands (X₃)	X3.1	1.000	0.700	Valid
Performance (Y)	Y.1	0.811	0.700	Valid
	Y.2	0.821	0.700	Valid
	Y.3	0.859	0.700	Valid
	Y.4	0.784	0.700	Valid
	Y.5	0.836	0.700	Valid
	Y.6	0.791	0.700	Valid

Work engagement (Z)	Y.6	0.751	0.700	Valid
	Z1	0.795	0.700	Valid
	Z.3	0.859	0.700	Valid
	Z.4	0.857	0.700	Valid
	Z.5	0.833	0.700	Valid
	Z.6	0.796	0.700	Valid
	Z.7	0.799	0.700	Valid
	Z.8	0.851	0.700	Valid
	Z.9	0.838	0.700	Valid

Source: Data processed result obtained using smartPLS, 2024

Based on the Outer Loading values in Table 1, it can be seen that all indicators in the model have a minimum outer loading value of 0.70, indicating that all indicators are valid.

Table 2. Summary of Reliability Testing Results

Variable	Cronbac's alpha	Composition reliability (rho a)	Composition reliability (rho c)	Average Variance Extracted (AVE)
Job demands	1.000	1.000	1.000	1.000
Job Resources	0.810	0.814	0.876	0.639
Performance	0.896	0.897	0.920	0.658
Resilience	0.904	0.904	0.923	0.600
Work engagement	0.935	0.935	0.946	0.687

Data processed result obtained using smartPLS, 2024

A model is deemed reliable if the Average Variance Extracted (AVE) exceeds 0.5 or if Cronbach's alpha value surpasses 0.6. Table 1 demonstrates that all indicators have outer loading values greater than 0.700, confirming their validity. Table 2 shows that the Cronbach's alpha for all indicators exceeds 0.6, and the AVE is above 0.5, thereby confirming the reliability of all indicators used in the study. According to Hair et al. (2014), convergent validity is present when measurement indicators used to measure a construct are closely related. The result showing an AVE value greater than 0.7 suggests good convergent validity, corroborated by Hair et al. (2014) and Alotaibi and Alshahrani (2022).

The Inner Model involves structural model testing to assess the relationships between latent constructs. This testing includes several calculations to determine model suitability, such as the coefficient of determination (R^2), effect size (f^2), Standardized Root Mean Square Residual (SRMR), and predictive relevance (Q^2). The criteria for R^2 values are 0.67 (substantial), 0.33 (moderate), and 0.19 (weak). The f^2 values are categorized as 0.02 (small influence), 0.15 (moderate influence), and 0.35 (large influence). A model meets the fit criteria if the SRMR value is less than 0.1. The thresholds for Q^2 are 0.02 (small), 0.15 (medium), and 0.35 (large), as discussed by Hair et al. (2014).

Table 3. Summary of Model Fit Assessment Result

Variables	R-Squared adjusted	F-Square		Q-Square Predictive Relevance	SRMR
		Y	Z		
Resilience (X ₁)		0.006	0.314		
Job Resources (X ₂)		0.060	0.217		
Job demands (X ₃)		0.034	0.011		0.061
Performance (Y)	0.755			0.488	
Work engagement (Z)	0.666	0.673		0.407	

Data processed result obtained using smartPLS, 2024

Based on the R² values presented in the table, it can be concluded that resilience, job resources, and job demands explain 75.50% of performance variance, with the remaining percentage attributable to other factors. Similarly, these variables account for 66.60% of the work engagement variance. The F-square values indicate that resilience and job resources have a small effect on performance but a moderate effect on work engagement.

Additionally, the Q² value for performance is 0.488, demonstrating that the model is highly effective at predicting performance outcomes. The Q² value for work engagement is 0.407, indicating strong predictive accuracy for work commitment. The model's fit is further confirmed by an SRMR value below 0.1, signifying that the model is well-suited to the data.

Hypothesis Testing

The hypothesis testing stage, employing bootstrapping methodology, confirms the direction and significance of relationships between latent variables using SmartPLS 3.0. A t-statistic value greater than 1.96, with a significance level of 5% ($\alpha = 0.05$) and a p-value less than 0.05, leads to the acceptance of alternative hypotheses and the rejection of null hypotheses.

Table 4. Path Coefficients

Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistic (O/STDEV)	P-values
X ₁ → Y	0.057	0.055	0.053	1.076	0.283
X ₁ → Z	0.458	0.454	0.061	7.478	0.000
X ₂ → Y	0.168	0.169	0.055	3.079	0.002
X ₂ → Z	0.369	0.371	0.055	6.726	0.000

$X_3 \rightarrow Y$	0.108	0.106	0.039	2.803	0.005
$X_3 \rightarrow Z$	0.076	0.078	0.055	1.383	0.168
$Z \rightarrow Y$	0.645	0.651	0.059	10.888	0.000

Data processed result obtained using smartPLS, 2024

Based on the table above, the following results were obtained: First, the t-statistic value was 1.076 with a p-value of 0.283. As the t-statistic value is less than 1.96 and the p-value exceeds 0.05, H1 is rejected, indicating no positive relationship between resilience and performance. Second, the t-statistic was 7.478 with a p-value of 0.000. Since the t-statistic value exceeds 1.96 and the p-value is less than 0.05, H2 is accepted, confirming a positive relationship between resilience and work engagement. Third, a t-statistic of 3.079 and a p-value of 0.002 were recorded, leading to the acceptance of H3, which affirms a positive relationship between job resources and performance. Fourth, with a t-statistic of 6.726 and a p-value of 0.000, H4 is accepted, showing a positive relationship between job resources and work engagement. Fifth, the t-statistic was 2.803 with a p-value of 0.005; thus, H5 is accepted, indicating a positive relationship between job demands and performance. Sixth, the t-statistic was 1.383 with a p-value of 0.168; thus, H6 is rejected, indicating no positive relationship between job demands and work engagement. Finally, with a t-statistic of 10.888 and a p-value of 0.000, H7 is accepted, demonstrating a positive relationship between work engagement and the performance of statistical partners.

Table 5. Specific Indirect Effects

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistic (O/STDEV)	P-values
$X_1 \rightarrow Z \rightarrow Y$	0.295	0.295	0.049	6.073	0.000
$X_2 \rightarrow Z \rightarrow Y$	0.238	0.241	0.040	5.964	0.000
$X_3 \rightarrow Z \rightarrow Y$	0.049	0.051	0.037	1.342	0.181

Data processed result obtained using smartPLS, 2024

Based on the table above, the p-value $X_1 \rightarrow Z \rightarrow Y$ is 0.000, meaning that work engagement significantly mediates the influence of resilience on performance. The p-value of $X_2 \rightarrow Z \rightarrow Y$ is 0.000, meaning that work engagement significantly mediates the effect of job resources on performance. The p-value of $X_3 \rightarrow Z \rightarrow Y$ is 0.181, meaning that work engagement does not significantly mediate

the effect of job resources on performance.

Discussion

Based on the research findings, it can be concluded that resilience, job resources, and job demands significantly influence performance and work engagement among statistical partners in South Tapanuli. Resilience has a positive effect on performance, both directly and through work engagement, with work engagement playing a mediating role in the resilience-performance relationship. This is consistent with the Job Demand-Resources (JD-R) theory, which highlights resilience as a key resource that enhances employee well-being and work engagement, as supported by Moon et al. (2013). Additionally, the findings align with studies by Puspo Wiroko (2021) and Cao & Chen (2019), which confirm that resilience contributes positively to work engagement.

The positive impact of job resources on performance is also highlighted in this study, both directly and through the mediating role of work engagement. This affirms the JD-R theory, which posits that job resources such as support, skill discretion, and team empowerment foster higher engagement and performance, as confirmed by Bakker et al. (2023) and Radic et al. (2020). Effective job resources, including fair evaluations, sufficient support, and cohesive teamwork, significantly enhance employee engagement, leading to improved performance outcomes.

Contrary to expectations, job demands do not influence work engagement significantly, although they directly affect performance. This observation indicates that job demands at BPS are balanced with the available job resources, as noted in the JD-R theory. Although job demands typically exacerbate strain, in this case, they positively impact performance due to the availability of adequate job resources to mitigate their negative effects. The lack of mediation by work engagement in the job demands-performance relationship highlights that the statistical partners possess the necessary resilience and job resources to meet their job requirements without compromising performance.

CONCLUSION

This study concludes that resilience enhances the performance of statistical partners in Mandailing Natal and South Tapanuli, with work engagement acting as a mediator. Job resources directly improve performance and have an indirect effect via work engagement. Job demands, while influencing performance positively, do not engage work engagement as a mediator. To improve performance, BPS should focus on enhancing job resources by offering support, encouraging

teamwork, ensuring fair assessments, and providing suitable compensation and career opportunities. Additionally, establishing clear evaluation criteria will ensure fairness in performance evaluations, leading to sustained high performance among BPS partners.

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