

Improving The Performance of Education Personnel in The Modern Education Era Reviewed from The Aspects of Humanistic MSDM, Psychological Well-Being, Competency Development, and Job Satisfaction Through Work Engagement Mediation

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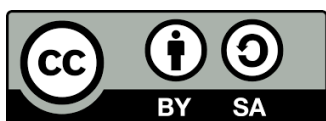
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Abstract

Modern educational institutions require education personnel who can provide effective administrative and academic services amid increasing organizational and technological demands. This study examined the effects of humanistic human resource management, psychological well-being, competency development, and job satisfaction on education personnel performance, with work engagement as a mediating variable. An explanatory quantitative research design was employed at Al Hikmah Senior High School in Surabaya. Using total sampling, questionnaires were administered to 125 education personnel, and the data were analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS. The results showed that humanistic human resource management, psychological well-being, competency development, and job satisfaction positively and significantly influenced work engagement. Among these variables, psychological well-being demonstrated the strongest effect on work engagement ($\beta = 0.461$). Furthermore, work engagement significantly improved education personnel performance ($\beta = 0.513$). Competency development and job satisfaction had significant direct effects on performance, whereas humanistic human resource management and psychological well-being did not demonstrate significant direct effects. Work engagement fully mediated the effects of humanistic human resource management and psychological well-being on performance and partially mediated the effects of competency development and job satisfaction. These findings position work engagement as a key psychological mechanism and highlight the importance of supportive management practices, employee well-being, continuous competency development, and enhanced job satisfaction in improving education personnel performance.



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INTRODUCTION

The development of the education sector in the modern era is characterized by increasing demands for the quality of educational institution management. Schools are no longer viewed solely as institutions that organize teaching and learning processes but also

as organizations that must manage human resources professionally. The success of an educational institution is determined not only by the quality of educators but also by the performance of education personnel who support administrative processes, academic services, and the overall management of the education system (Alsakarneh et al., 2024). Therefore, improving the performance of education personnel is an important aspect that requires attention in human resource management within the education sector.

Changes in an increasingly dynamic educational environment require educational institutions to manage human resources in an adaptive and human-centered manner. The modern education era emphasizes not only work efficiency but also psychological well-being, competency development, and employee job satisfaction as factors influencing organizational performance. In this context, work engagement is one of the variables that bridges the relationship between various organizational factors and individual performance. It refers to a positive psychological state characterized by high levels of energy, dedication to work, and full involvement in carrying out tasks.

The performance issues of education personnel can be identified from the preliminary data obtained from the Al Hikmah Senior High School environment in Surabaya as the research setting, as presented in Table 1.

Table 1. Indications of Performance Problems of Education Personnel

Performance Appraisal Aspects	Ideal Conditions	Actual Condition	Remarks
Timeliness of job completion	$\geq 90\%$	82%	Some administrative work is late
Quality of administrative services	$\geq 90\%$	85%	Service is not optimal
Innovation in work	$\geq 85\%$	75%	Work initiatives still low
Involvement in organizational activities	$\geq 90\%$	78%	Employee participation has not been maximized
Adaptation to digital systems	$\geq 85\%$	76%	Still needs to improve competence

Source: Initial observation of the environment of Al Hikmah High School Surabaya (2026)

Based on Table 1, all observed aspects remained below the ideal conditions, with gaps ranging from 5 to 12 percentage points. The largest gap was found in involvement in organizational activities (12 points), followed by work innovation (10 points), digital system adaptation (9 points), punctuality (8 points), and the quality of administrative services (5 points). This pattern indicates that performance problems are multidimensional and cannot be explained by a single factor but rather result from interactions among individual capabilities, psychological conditions, work experience, and organizational support.

Previous studies have shown inconsistencies in positioning and testing the relationships among these variables. Some studies position humanistic human resource management as an antecedent of work engagement (Saks, 2021), while others position work engagement as a mediator in the relationship between human resource management and organizational performance (Alsakarneh et al., 2024; Permadi et al., 2025). Similarly, studies on psychological well-being have positioned it as a direct antecedent of performance (Prasojo et al., 2025), examined its relationship with job satisfaction (Widiartha, 2024), and positioned work engagement as an intervening variable (Pashiera & Budiono, 2020). Similar inconsistencies have also been identified in studies on competency development (Sunarsi et al., 2020), as well as in the positioning of job satisfaction and work engagement in relation to performance (Aziez, 2022; Prajadiredja et al., 2026; Szostek, 2024).

Based on this analysis, this study identified five research gaps: (1) a conceptual gap, as limited models have simultaneously integrated humanistic human resource management, psychological well-being, competency development, and job satisfaction as antecedents of work engagement and education personnel performance; (2) a mechanism gap, as many studies have not sufficiently explained the psychological processes connecting organizational and personal resources with performance outcomes; (3) a contextual gap, as studies specifically focusing on education personnel remain limited; (4) a human resource management orientation gap, as the configuration of humanistic human resource management has not been specifically examined; and (5) an empirical gap derived from the performance gap phenomenon presented in Table 1, for which the underlying causes remain unclear.

The novelty of this research lies in positioning work engagement as a psychological mechanism that explains the transformation process of humanistic human resource management, psychological well-being, competency development, and job satisfaction into improved education personnel performance by simultaneously examining direct and indirect pathways within the context of education personnel in modern educational institutions. Based on the description above, this study aims to analyze the effects of humanistic human resource management, psychological well-being, competency development, and job satisfaction on work engagement and education personnel performance, both directly and through the mediation of work engagement. This study is expected to provide theoretical contributions to the development of human resources in the education sector and practical contributions to the formulation of education personnel management policies that are more human-centered, adaptive, and performance-oriented.

METHOD

This study employed a quantitative approach with an explanatory research design to examine the causal relationships among independent variables, the mediating variable, and the dependent variable. The research was conducted at Al Hikmah Senior High School in Surabaya, selected based on its sufficient number of education personnel and organizational structure involving various administrative work units.

The research population consisted of all education personnel at Al Hikmah Senior High School in Surabaya who had a minimum educational qualification of senior high school/vocational high school and at least two years of work experience, totaling 125 individuals. Since the population size was relatively limited and accessible, a total sampling technique was applied, in which all 125 education personnel were included as respondents.

The study involved three types of variables: independent variables, consisting of humanistic human resource management, psychological well-being, competency development, and job satisfaction; a mediating variable, namely work engagement; and a dependent variable, namely education personnel performance. The operational definitions of the variables are presented in Table 2.

Table 2. Operational Definition of Research Variables

Variable	Operational Definition	Indicator	Source
Performance of Education Personnel	The results of the work achieved by education personnel in carrying out their duties effectively and efficiently	Quality of work; quantity of work; punctuality; cooperation; responsibility	Audia et al. (2025)
Work Commitment	Positive psychological condition in the form of the individual's full involvement in the work	Vigor; dedication; absorption	Mashu (2025)
Humanistic MSDM	Human resource management that places people as the main asset of the organization	Organizational support; humane treatment; empowerment; appreciation of human values	Ispini (2024)
Psychological Well-Being	Positive psychological conditions of individuals in carrying out tasks optimally	Self-acceptance; positive relationships; autonomy; mastery of the environment; life goals	Wandra (2025)
Competency Development	Organizational efforts to improve employees' abilities, knowledge, and work attitude	Education and training; skills development; knowledge development; career development	Widiartha (2024)
Job Satisfaction	An individual's level of satisfaction with various aspects of his or her work	Job satisfaction; superior; work environment; organizational system	Islam (2025)

Source: Results processed by researchers (2026).

Data were collected through questionnaires distributed to all respondents using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Each variable indicator was measured using two statement items, resulting in a research instrument consisting of 44 items covering all six research variables.

The validity and reliability of the instruments were tested using preliminary data from 30 respondents. Item validity was assessed using Pearson's Product-Moment

correlation, while reliability was evaluated using Cronbach's Alpha. The main data analysis was conducted using structural equation modeling-partial least squares (SEM-PLS) with SmartPLS, consisting of two stages: measurement model evaluation (outer model) and structural model evaluation (inner model) (Hair et al., 2021).

The outer model evaluation included convergent validity, assessed through outer loading values and Average Variance Extracted (AVE), discriminant validity using the Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT), and reliability testing using Cronbach's Alpha and Composite Reliability. The inner model evaluation included the coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2), with the interpretation criteria presented in Table 3.

Table 3. Interpretation Criteria of R-Square and F-Square

R^2 Value	Interpretation	Value f^2	Interpretation
0,75	Strong	0,02	Small influence
0,50	Moderate	0,15	Moderate influence
0,25	Weak	0,35	Big influence

Source: Hair et al. (2021)

Hypothesis testing was conducted using a bootstrapping procedure with a one-tailed approach at a 5% significance level ($\alpha = 0.05$). The significance of direct and indirect effects was evaluated based on path coefficients, T-statistics, and P-values. The same criteria were applied to the indirect effect analysis to determine the mediating effect of work engagement using the specific indirect effects procedure in SmartPLS.

RESULTS AND DISCUSSION

Overview of Research Objects

Al Hikmah Surabaya High School is a private secondary education institution in the city of Surabaya with a National School Identification Number (NPSN) 20549721, established based on Decree Number 421/5870.1/436.4.9/2005 dated September 21, 2005. This school has A accreditation status and implements an Innovative Curriculum. Education personnel at this school have an important role in supporting the smooth running of academic administration, student services, and the management of educational information systems.

Instrument Validity and Reliability Test Results

Validity testing of 44 statement items on six study variables using pre-sampling data of 30 respondents showed that all items were declared valid, with Pearson's r-values ranging from 0.771 to 0.954 and significance of 0.000 for all items (less than $\alpha = 0.05$). The results of reliability testing using Cronbach's Alpha are presented in Table 4.

Table 4. Results of the Reliability Test of Research Variables

Variable	Cronbach's Alpha	Remarks
Performance of Education Personnel	0,969	Reliable
Work Commitment	0,932	Reliable
Humanistic MSDM	0,962	Reliable
Psychological Well-Being	0,977	Reliable
Competency Development	0,942	Reliable
Job Satisfaction	0,956	Reliable

Source: Primary data processed (2026).

All variables obtained a Cronbach's Alpha value above 0.70, even in the range of 0.932-0.977, so that the research instrument was declared very reliable and suitable for further data collection.

Respondent Characteristics

The characteristics of the 125 study respondents are presented in Table 5.

Table 5. Characteristics of Research Respondents

Categories	Groups	Quantity	Percentage
Gender	Male	71	56,8%
	Women	54	43,2%
Age	21-30 years old	39	31,2%
	31-40 years old	58	46,4%
	41-50 years old	14	11,2%
	> 51 years old	14	11,2%
Education	High School/Vocational School	49	39,2%
	Diploma	19	15,2%
	S1	57	45,6%
Tenure	< 5 years	39	31,2%
	6-10 years	42	33,6%
	11-15 years	25	20,0%
	> 16 years old	19	15,2%

Source: Primary data processed from Google Forms (2026).

The majority of respondents were male (56.8%), aged 31-40 years (46.4%), educated at the end of S1 (45.6%), and had a working period of 6-10 years (33.6%). This composition shows that education personnel are in the productive age range with a relatively adequate educational background and work experience to support the implementation of tasks.

Descriptive Statistics of Research Variables

Descriptive analysis was carried out to determine the respondents' perception of the six research variables based on a Likert scale of 1-5. A summary of the average values of each variable is presented in Table 6.

Table 6. Summary of Descriptive Statistics of Research Variables

Variable	Average	Categories
Humanistic MSDM	3,864	Height
Psychological Well-Being	3,867	Height
Competency Development	3,85	Height
Job Satisfaction	3,86	Height
Work Commitment	3,87	Height
Performance of Education Personnel	3,88	Height

Source: Primary data processed (2026).

All research variables obtained an average score in the high category (ranging from 3.85-3.88 from a maximum scale of 5), which shows that respondents generally have a positive perception of the application of Humanistic Human Resource Management, Psychological Well-Being conditions, Competency Development opportunities, Job Satisfaction, Work Engagement, and Performance of Education Personnel at SMA Al Hikmah Surabaya. However, the average score that is not close to the maximum score shows that there is still room for improvement in each variable.

Evaluation of Measurement Models and Structural Models

The evaluation of the outer model showed that all indicators had an outer loading value above 0.70 and an Average Variance Extracted (AVE) value above 0.50, so that the convergent validity was met. Discriminant validity testing through the Fornell-Larcker Criterion and the Heterotrait-Monotrait Ratio (HTMT) showed that the entire HTMT value was below 0.90, so that each variable had an adequate level of difference with the others. The composite reliability test and Cronbach's Alpha on all latent variables were also above 0.70, so the measurement model was declared suitable for structural model testing.

The internal evaluation of the model showed that the R-Square value for the Work Engagement and Education Personnel Performance variables was in the moderate to strong category, which means that the four independent variables were able to explain a considerable proportion of variance in Work Engagement, and Work Engagement with the independent variable was able to explain a large proportion of variance in Education Personnel Performance. The Predictive Relevance (Q^2) value for the two dependent variables was greater than zero, which indicates that the research model has good predictive relevance. Common Method Bias testing also shows that the research data does not experience excessive measurement method bias, so that the structural model estimation results can be interpreted reliably.

Hypothesis Testing (Path Coefficient)

Hypothesis testing was carried out through a bootstrapping procedure on SmartPLS with a one-tailed approach at $\alpha = 0.05$ (critical T-statistics = 1.645). The results of the direct influence testing are presented in Table 7.

Table 7. Direct Effect Test Results

Pathway	Coefficient (O)	T-Statistics	P-Values	Remarks
MSDM Humanistic → Work Engagement	0,300	4,618	0,000	Positive, Significant
Psychological Well-Being → Work Engagement	0,461	8,401	0,000	Positive, Significant
Competency Development → Work Engagement	0,224	3,625	0,000	Positive, Significant
Job Satisfaction → Work Engagement	0,202	3,076	0,001	Positive, Significant
Work Engagement → Education Personnel Performance	0,513	6,081	0,000	Positive, Significant
Humanistic Human Resources → Education Personnel Performance	0,092	1,154	0,124	Positive, Insignificant
Psychological Well-Being → Performance of Education Personnel	0,028	0,329	0,371	Positive, Insignificant
Competency → Performance Development of Education Personnel	0,145	2,058	0,020	Positive, Significant
Job Satisfaction → Performance of Education Personnel	0,133	1,851	0,032	Positive, Significant

Source: Primary data processed with SmartPLS 4 (2026).

Table 7 shows that the four independent variables (Humanistic MSD, Psychological Well-being, Competency Development, and Job Satisfaction) have a positive and significant effect on Work Engagement, so that H1, H2, H3, and H4 are accepted. Psychological Well-being has the largest path coefficient (0.461) for Work Engagement, followed by Humanistic MSDM (0.300), Competency Development (0.224), and Job Satisfaction (0.202). Work Engagement has also been shown to have a positive and significant effect on the Performance of Education Personnel (coefficient 0.513; T-statistics 6.081), so H5 is accepted.

In the direct effect on performance test, only Competency Development (coefficient 0.145; T-statistics 2.058; $p = 0.020$) and Job Satisfaction (coefficient 0.133; T-statistics 1.851; $p = 0.032$) were proven to have a positive and significant effect, so H8 and H9 were accepted. In contrast, Humanistic MSDM (T-statistics 1.154; $p = 0.124$) and Psychological Well-being (T-statistics 0.329; $p = 0.371$) showed a positive but not directly significant effect on performance, so H6 and H7 were not statistically supported.

The results of the specific indirect effects test through Work Engagement are presented in Table 8.

Table 8. Indirect Effect Test Results

Mediation Pathway	Coefficient (O)	T-Statistics	P-Values	Types of Mediation
Humanistic MSDM → Work Engagement → Performance	0,154	3,580	0,000	Full mediation
Psychological Well-Being → Work Engagement → Performance	0,237	4,992	0,000	Full mediation
Competency Development → Work Engagement → Performance	0,115	3,140	0,001	Complementary partial mediation
Job Satisfaction → Work Engagement → Performance	0,104	2,706	0,003	Complementary partial mediation

Source: Primary data processed with SmartPLS 4 (2026).

Table 8 shows that all indirect pathways through Work Engagement are statistically significant (T-statistics > 1.645 and P-values < 0.05), so H10, H11, H12, and H13 are accepted. Because the direct influence of Humanistic MSDM and Psychological Well-being on performance is not significant while the indirect influence is significant, Work Engagement plays the role of full mediation/indirect-only mediation in both relationships. Conversely, because the direct and indirect influence of Competency Development and Job Satisfaction on performance are equally significant, Work Engagement acts as a complementary partial mediation in both relationships.

The results of the study show that Humanistic MSDM has a positive and significant effect on Work Engagement. These findings confirm that organizational treatment that is oriented towards human values, such as organizational support, humane treatment, empowerment, and appreciation for human values, is able to create a positive psychological relationship between education personnel and the organization thereby encouraging the formation of vigor, dedication, and absorption. This finding is consistent with Saks (2021) who shows that caring HRM increases employee engagement, and is in line with the motivational process in JD-R Theory (Bakker & Demerouti, 2017).

Psychological Well-being was also shown to have a positive and significant effect on Work Engagement with the largest path coefficient among the four independent variables. Good psychological well-being, which includes self-acceptance, positive relationships, autonomy, mastery of the environment, and life goals, provides personal resources that help educators maintain energy and engagement at work. These findings are in line with Ryff (2024) and Schaufeli (2021) who affirm the role of psychological resources in shaping work attachment.

Competency Development and Job Satisfaction have also been proven to have a positive and significant effect on Work Engagement as well as on the Performance of Education Personnel directly. These results show that these two variables have a dual-

effect character, namely they can improve performance directly through improving actual abilities and positive work attitudes, as well as indirectly through strengthening Work Engagement. These findings are consistent with Sunarsi et al. (2020) for competency development and with Onyebuchi (2019) and Prajadiredja et al. (2026) for Job Satisfaction.

The most substantive finding in this study is the discovery of two different mediation patterns. Humanistic MSDM and Psychological Well-being show a pattern of indirect-only mediation or full mediation, which means that the two resources have not been able to improve performance directly if they have not succeeded in forming the energy, dedication, and attachment of education personnel to their work. On the other hand, Competency Development and Job Satisfaction show a complementary partial mediation pattern, because both have direct and indirect influence paths that are equally significant on performance. This difference in pattern strengthens the Job Demands-Resources Theory by showing that resources that are more humanistic and psychological tend to require motivational activation through Work Engagement, while resources that are closer to actual abilities and work experience evaluations have more direct paths of influence while still being strengthened by engagement.

Overall, the results of this study prove that Work Engagement has a central position as a psychological mechanism that explains how Humanistic Human Resources, Psychological Well-Being, Competency Development, and Job Satisfaction translate into improved Education Workforce Performance in the modern education era. The practical implication of these findings is that improving the performance of education personnel cannot be done with a uniform policy; organizations need to ensure that humanistic practices and efforts to improve psychological well-being are truly translated into job attachment, while competency development and job satisfaction improvement programs need to be continuously strengthened as they provide dual benefits for performance improvement.

CONCLUSIONS

This study demonstrated that humanistic human resource management, psychological well-being, competency development, and job satisfaction had positive and significant effects on work engagement, which subsequently had a positive and significant effect on education personnel performance. However, in terms of direct effects, only competency development and job satisfaction significantly influenced performance. Work engagement was found to mediate these relationships, showing full mediation for humanistic human resource management and psychological well-being, as well as complementary partial mediation for competency development and job satisfaction. Therefore, all hypotheses were supported by the data except H6 and H7, which examined the direct effects of humanistic human resource management and psychological well-being on performance. These findings confirm that work engagement functions as a key psychological mechanism that transforms organizational and personal resources into improved education personnel performance in the modern education era.

Based on these findings, educational institutions are recommended to strengthen work engagement through supportive work environments, recognition of employee contributions, involvement in decision-making processes, and open communication between leaders and education personnel. Institutions should also enhance competency development programs in a planned and sustainable manner, particularly through administrative training and educational digitalization initiatives, while improving job satisfaction through fair reward systems, supportive supervision, and career development opportunities. Future researchers are encouraged to expand research contexts to other educational institutions, employ larger samples and longitudinal designs, and incorporate additional variables such as leadership, organizational culture, compensation, and psychological capital, as well as moderator variables including age, tenure, and educational level, to achieve a more comprehensive understanding of factors influencing education personnel performance in educational institutions.

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