
THE IMPACT OF RESILIENCE SKILLS AND TEAMWORK EFFICIENCY ON INDIVIDUAL WORK PERFORMANCE WITH THE MEDIATION OF WORK ENGAGEMENT IN EMERGENCY INSTALLATION DOCTORS IN BANTEN PROVINCE, INDONESIA

Rivaldo Steven Heriyanto

Universitas Pelita Harapan, Indonesia

Email : raldostvn@gmail.com

ABSTRACT

Emergency department doctors face intense workloads, high stress, and complex patient care challenges. However, limited research has examined how resilience skills and teamwork efficiency influence their work performance, especially in Banten Province, Indonesia, where maternal mortality remains high. This study aims to analyze the impact of resilience skills and teamwork efficiency on individual work performance, with work engagement as a mediating variable. A quantitative, cross-sectional survey design was employed, collecting data from 196 emergency doctors in Banten Province through purposive sampling. Data analysis was conducted using Partial Least Squares-Structural Equation Modeling (PLS-SEM) via SmartPLS software. The results revealed that resilience skills and teamwork efficiency significantly enhance work engagement, positively affecting work performance. Notably, the mediating effect of work engagement strengthened the relationship between independent variables and performance outcomes. These findings suggest that hospital management should prioritize programs to enhance physician resilience and foster efficient teamwork, as these human factors are critical in improving emergency care quality and reducing maternal mortality rates. Future research should incorporate longitudinal studies and additional variables such as organizational support and burnout to enrich understanding in this field further.

KEYWORDS

Resilience Skills, Teamwork Efficiency, Work Engagement, Work Performance, Emergency Physicians



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INTRODUCTION

The emergency department (ER) is a very complex environment and is a difficult environment in which to provide health services, so this department is very vulnerable to unexpected incidents and events (Falkland, Wiggins, Douglas, Sturman, Auton, Shieh, Westbrook, 2022; Gaeta & Brennessel, 2020). Several

How to cite:

E-ISSN:

Heriyanto, R. S. (2025). The Impact of Resilience Skills and Teamwork Efficiency on Individual Work Performance with The Mediation of Work Engagement in Emergency Installation Doctors in Banten Province, Indonesia. Journal Eduvest. 5(4): 4728-4743.
2775-3727

characteristics make an emergency department more complex than others, namely the potential characteristics of an unlimited number of patients, simultaneous evaluation of several patients with different characteristics, high levels of uncertainty, extreme time constraints, lack of input on the success of management, and the need for unpredictable risky medical procedures (Wears, Woloshynowych, Brown, Vincent., 2010). These characteristics make the emergency room the "gateway" or "front line" of a hospital, as we can see the role of the emergency department during the COVID-19 pandemic (Gaeta & Brennessel, 2020; Mitchell et al. (2022), O'Reilly, Herron, Phillips, Sharma, Brolan, Korver, Kendino, Poloniati, Kafoa, Cox, 2022). Acting as a vital access point, the emergency department has a high visitation rate (Mansuri et al., 2023). In the United States, the number of emergency room visits in 2024 will reach 139.8 million people, with the number of visits per 100 people at 42.7. (CDC, 2022). In Indonesia alone, a survey of 118 emergency departments in Jakarta shows that there are around 2 million visits to emergency departments every year (Habib & Sudaryo, 2023).

With a large number of patients, coupled with the factors that make the emergency department very complex, several problems have arisen to date, such as excessive patient density, service delays, distraction during services, and others Barish et al. (2012); Sartini et al., 2022). These things will ultimately affect the performance of health workers working in the emergency room and the occurrence of an increase in malpractice, thus having an impact on the success of the management given to patients (Crawford, 2020). Given the variability of patients visiting the emergency department, errors can range from inappropriate management of the disease, worsening of clinical conditions, to loss of human life (Rasouli et al., 2019).

We can see the impact of these problems directly in Indonesia. If we observe health indicators based on sustainable developmental goals set by the United Nations (UN) in 2015, one of these indicators is maternal mortality (World Health Organization, 2015). Maternal mortality or maternal mortality rate (MMR) is defined as the annual maternal mortality rate caused by a related cause, or exacerbated by pregnancy or a given management. (World Health Organization, 2015a) Pregnant women are one of the most frequent emergency department visitors, especially pregnant women who have pregnancy-related complications, or worsening of a long-standing comorbidity (Dyrbye et al., 2017). Matenchuk et al. (2023); Preiksaitis et al. (2024) The target given by the SDGs for all countries that are members of the United Nations is a maternal mortality ratio <70 per 100,000 live births. Data from the Jakarta provincial health office, which is the capital of Indonesia, showed 99 maternal deaths or 74.8 deaths per 100,000 live births in 2022. (DKI Jakarta Provincial Health Office, 2023). This figure is already close to the target given by the WHO. However, it still remains higher than expected. Unfortunately, this ratio can be observed even higher in other regions, one of which is the province of Banten, a province that is right next to the province of DKI Jakarta (Dave & Taylor-Robinson, 2022).

Banten Province has an area of 9,352.77 km² and is inhabited by 12.31 million people. (Herlando, 2023) Due to its strategic location, large area, and abundant availability of natural resources, Banten province is one of the significant manufacturing provinces in Indonesia. (Abraham, 2022; Halim, 2018) Banten also

has Indonesia's third-highest population density, right after DKI Jakarta and West Java, at 1,248 people/km² (Jakarta, 2023). Although it is adjacent to Jakarta and is included in a highly developed area, the maternal mortality rate of Banten province is more than twice that of DKI Jakarta, which is 194 deaths in 2022 (Banten, 2023). If we observe data from the Banten provincial health office in previous years, the maternal mortality rate does not show a decrease, but instead tends to show an increase, namely 226 cases of deaths in 2017, 135 cases in 2018, 215 cases in 2019, and 237 cases in 2020 (Reeves et al., 2017).

Various kinds of interventions can be carried out to address this problem, one of which is to improve the performance of an emergency department, starting from interventions from managerial factors (e.g., decision-making structure, communication between doctor-supervisors, procedures), structural factors (e.g., resource allocation, hospital facilities, emergency facility design), and human factors (e.g., physicians, nurses, patients) Austin et al. (2020) There have been quite a lot of studies that discuss and research structural and managerial factors, for example about the optimal design of an emergency room, what tools must be in the emergency room, standard-operating procedures (SOPs) that must be carried out for various kinds of cases, and others, and generally, these things will not be much different from one hospital, and another hospital, except regarding the difference in facilities (Abdelsamad et al., 2018; Aroua & Abdulnour (2018); Tawfik et al., 2014). However, studies on human factors, especially the doctors on duty in emergency departments, are still rare (Bougie & Sekaran, 2020).

Doctors in emergency departments are the backbone of emergency medicine, describing the first, and sometimes, only point of contact for many individuals. (Huecker et al., 2022) Doctors in the emergency department are in charge of treating patients with acute health problems or traumatic injuries, or stabilizing patients in critical condition, until a doctor with the appropriate specialization arrives. (Lirk, 2023) Just like the performance of an emergency room, the performance of the doctor on duty in the department is influenced by several factors, which can be divided into two, namely external and internal factors Mosadeghrad (2014) External factors include the hospital's organizational, administrative, and facility structure, for example, the hospital's leadership, organizational culture, the amount of incentives provided, and others. Internal factors include socio-demographic doctors, motivation, job satisfaction, and others (Mosadeghrad, 2014; Silich & Yang, 2012; Wenghofer et al., 2009). However, of the many factors above, teamwork efficiency, resilience skills, and their impact on doctors' performance in the emergency room have still not been studied.

Resilience skills are a person's ability to survive in the midst of many obstacles or problems faced (Krijgheld et al., 2022; Lesener et al., 2019; Lirk, 2023a). A systematic review conducted by Handini et al. (Handini et al., 2020) showed a positive effect of resilience on all performance domains in nurses and on nurse performance in general. The same thing can also be observed regarding teamwork efficiency (Baker et al., 2016). A qualitative study conducted by Khademian et al. Khademian F., Tabei S. Z., Bolandparvaz S., Abbaszadeh A., and Abbasi H. R. (2013) on nurses and supervisors in the emergency department, stated the importance of improving communication and coordination while working in the

emergency department to improve team performance, which in turn will have an impact on patient outcomes (Al-Ahmari & Kattan, 2024).

One more factor is generally often associated with work performance, both in the corporate world and the health world, namely work engagement. (Abdelsamad et al., 2018; Abun, 2021; Asdiani et al., 2024). Work engagement can be defined as a state that, as a whole, describes positive work behavior and well-being (Radic et al., 2020). A systematic review conducted by Scheepers (2017) stated that work engagement has a positive effect on the work performance of doctors in their role as teaching staff in an academic hospital. Another study conducted by Lourenção P. C. and Gazetta C. E. and da Silva A. G. and Castro J. R. and Maniglia J. V. (2022) supports a similar hypothesis in the family medicine population.

The importance of this research is that by knowing the factors that can improve the performance of emergency room doctors, one of the indicators of the success of an emergency department, namely the mortality rate, especially the maternal mortality rate, can be suppressed (Lesener B. and Wolter C., 2019). With the reduction in maternal mortality rates, the SDG targets set by the United Nations discussed earlier can be achieved with this latest information. If this research is not carried out, the mortality rate of an area, especially the maternal mortality rate, is at risk of not changing, or even increasing the maternal mortality rate. This will certainly have a bad impact on the welfare of a region, as explained in the SDGs (Lirk, 2023b).

Departing from the existing problems, and based on the results of previous research, several references were found that led to the importance of raising the topic of work performance in emergency department doctors; therefore, in this study, several factors were developed related to the work performance of emergency department care doctors (Krijgsheld L. G. and Scheepers F. E., 2022). Some of these factors are resilience skills, teamwork efficiency, and work engagement (Atingabili et al., 2021; Epstein & Krasner, 2013; Khademian et al., 2013; Lourenção et al., 2022; W. B. Schaufeli & Bakker, 2004.; Sheikhrabori et al., 2022). Based on data from the Health Office, Banten Province has still not succeeded in reducing the maternal mortality rate as of 2022, and this figure is still more than twice the maternal mortality rate in DKI Jakarta, a province right next to Banten Province. One of the factors that can help reduce the maternal mortality rate is the work performance of the doctor in charge of the emergency room, a department that is often visited by mothers and pregnant women (Khamisa K. and Ilic D. and Oldenburg B., 2017).

Although previous studies have extensively examined factors affecting healthcare workers' performance, including leadership, organizational culture, and job satisfaction, there remains a lack of research focusing specifically on the role of resilience skills and teamwork efficiency among emergency department doctors. This gap is particularly evident in regions like Banten Province, Indonesia, where the maternal mortality rate is alarmingly high despite being adjacent to more developed areas such as Jakarta. The uniqueness and complexity of emergency department environments demand a deeper understanding of human factors that directly influence work performance, which has not been sufficiently explored in existing literature.

This study introduces novelty by integrating resilience skills and teamwork efficiency into a comprehensive model with work engagement as a mediating variable to analyze its impact on individual work performance. Unlike prior research that often isolates these variables or focuses on general medical staff, this study specifically targets emergency department doctors, who face high stress, unpredictable patient conditions, and critical decision-making responsibilities. By doing so, this research provides a fresh perspective on how these factors interact to shape performance outcomes in high-pressure healthcare settings.

This study aims to analyze the influence of resilience skills and teamwork efficiency on individual work performance through the mediating role of work engagement among emergency department doctors in Banten Province. The findings are expected to contribute academically by enriching the discourse on human factors in healthcare performance and offering practical benefits for hospital management. These include formulating targeted interventions such as resilience-building programs and teamwork optimization strategies to improve service quality in emergency departments, ultimately supporting efforts to reduce maternal mortality rates in the region.

RESEARCH METHOD

This quantitative survey research is grounded in positivism, where knowledge is derived from objective observations following systematic procedures. The research analyzes variables outlined in the conceptual framework, using data collected from respondents. The dependent variable is work performance, predicted directly by resilience skills, teamwork efficiency, and work engagement, with work engagement also serving as a mediating variable. The unit of analysis is individual, specifically targeting emergency room doctors in hospitals across Banten Province. This profession was chosen due to its high workload, stress level, and critical role in patient care, yet it remains underrepresented in similar research studies.

The research design adopts a cross-sectional approach, collecting data at a single point through structured questionnaires. Hypothesis testing aims to determine the influence of variables using significance values derived from the collected data, enabling generalization to a broader population. Correlation analysis measures the strength and direction of relationships between constructs. The operationalization of variables involves defining measurable attributes, recognizing that values may vary across different times and individuals. Both dependent and independent variables are included to examine their impact on work performance comprehensively.

Sampling was conducted using a non-probability, purposive sampling method, focusing on emergency room doctors working in Banten Province during October-November 2024. Due to the limitations in population size identification, the sample size was determined based on the PLS-SEM analytical method, requiring a minimum of 155 respondents to ensure statistical strength. Questionnaires were distributed online through hospital management channels, allowing targeted data collection from eligible participants. The primary data were obtained through respondents' answers to Likert scale-based statements, complemented by demographic information (Merino-Soto et al., 2022).

In addition to primary data, secondary sources such as literature, books, and official reports were utilized to support the research framework and contextual analysis. These secondary sources provided theoretical foundations and background information relevant to the study's objectives but were not directly analyzed as primary data. The integration of primary and secondary data ensured a robust and comprehensive approach to examining the factors influencing emergency room doctors' work performance, contributing valuable insights to both academic and practical applications in healthcare management.

RESULT AND DISCUSSION

Respondent Profile

The research respondents were obtained through the distribution of online questionnaires in October-November 2024. The online questionnaire was compiled in Google Form format and distributed using a questionnaire link to doctors in charge of emergency installations (IGD) in hospitals in Banten province. Before filling out the questionnaire, prospective respondents were first asked about their willingness to fill out the research questionnaire. From all the data entered, 196 respondents were found to have met the research inclusion criteria.

Inferential Analysis

The research focuses on work performance and uses a multivariate analysis method with the Partial Least Squares - Structural Equation Model (PLS-SEM). The analysis method with PLS-SEM is useful for analyzing more specifically the relationships between variables in a model consisting of several variables (Hair L. M. and Matthews R. L. and Sarstedt M., 2017). In this study (Hair et al., 2019; Sarstedt et al., 2017), data processing was conducted using SmartPLS® 4.1.0.9 software. The stages of data analysis are divided into two parts. The first stage is to evaluate the outer model or measurement model. This is done to test the reliability and validity of the variable indicators used in a model. The second stage is to evaluate the inner model or structural model. This stage is important to test the explanatory and predictive capabilities of the model as well as the significance of the influence between variables in the research model (Hair et al., 2019).

Measurement Model (Outer Model)

Using PLS-SEM analysis, it is known as the measurement model, which is also known as the outer model. This model is produced to test and evaluate the relationship of indicators with their latent variables (constructs). The measurement model analysis consists of two stages: the reliability test stage, followed by the validity test stage. The outer model analysis in this study uses SmartPLS® 4.1.0.9 with the calculate PLS Algorithm menu. The reflective outer model test according to the research model consisted of four parts, namely indicator reliability (by looking at the outer loading value), construct reliability (by looking at Cronbach's alpha and composite reliability values), construct validity/convergent validity (by looking at the average variance extracted or AVE value), and discriminant validity (by looking at the value of heterotrait-monotrait ratio).

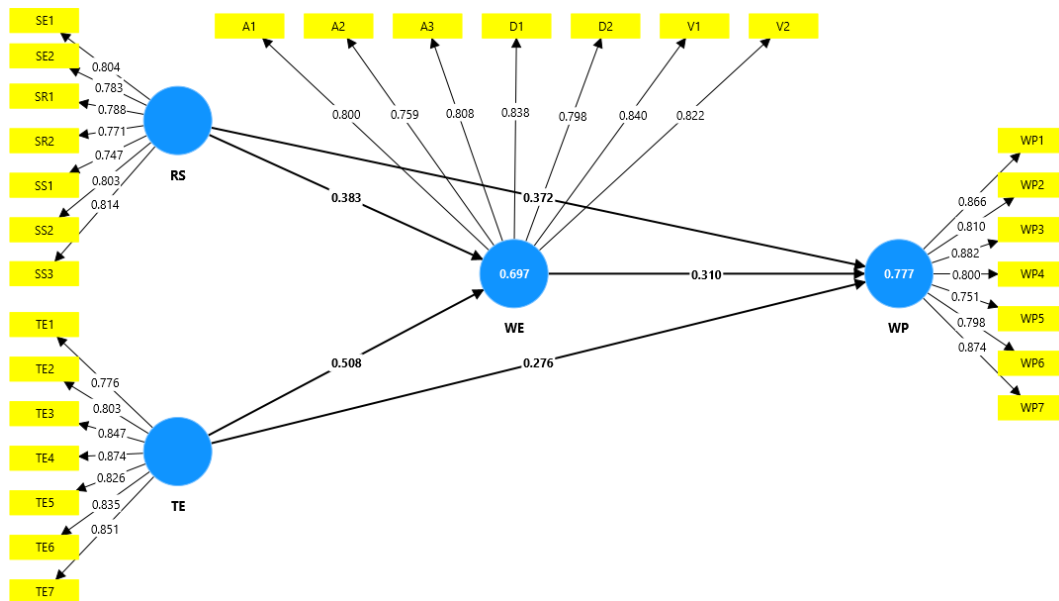


Figure 1. Outer Model

The results of the outer model show that all 28 indicators in this model are reflective and can be used in this study. Based on the empirical correlation matrix, it can be seen that the correlation between indicators is where the reflective indicators of each construct have a greater correlation value than the correlation of indicators between variables. With the fulfillment of the reliability and validity requirements of the indicators, the analysis can proceed to the structural analysis stage (Hair et al., 2019; Sarstedt et al., 2017). Based on the outer model image, it is shown that all indicators are included in the reliable category to measure their respective constructs

Indicator Reliability

The first stage of the outer model analysis was carried out by looking at reliability indicators (Hair et al., 2019). To assess the reliability indicator, it is seen from the outer loading. The minimum value limit is a requirement for each indicator so that it can be said to be reliable. In PLS-SEM, an indicator can be reliable if the outer loading value is more than 0.708 (Hair et al., 2019). The reliability test results found that the 28 indicators in the variables in this research model had an outer loading value of above 0.708 as the required limit (Hair et al., 2019). Therefore, it can be concluded that all indicators in this study have been reliable in measuring their respective constructs.

1. Construct Reliability

The second stage in conducting an outer model analysis is to look at the construct reliability (Sarstedt et al., 2017; Hair et al., 2019). In the outer model, reliability consistency tests were also carried out using Cronbach's alpha and composite reliability values. The condition of the results is that Cronbach's alpha must be above 0.7 as the lower bound, while the composite reliability value is between 0.7 and 0.95. The composite reliability value of 0.95 can be considered as the upper bound; if a value greater than this value is obtained, then it can be suspected that there is redundancy of the indicator (Hair et al., 2019). The results of the construct reliability test are shown in the table below.

Table 1. Nilai Construct Reliability

Variabel	Cronbach's alpha	Composite reliability	Result
<i>Resilience Skill</i>	0.898	0.901	Reliabel
Teamwork Efficiency	0.925	0.928	Reliabel
Work Engagement	0.912	0.916	Reliabel
Work Performance	0.923	0.927	Reliabel

It can be observed that *Cronbach's alpha* value on all of the above variables is more than 0.7. Then, in the same table, the composite reliability value for all variables is between 0.7 as the lower limit and 0.95 as the upper limit, so it can be concluded that there is no *redundancy* of the existing variables. From the results of the above consistency test, the researcher concluded that the indicators in this research model are reliable to measure their respective constructs

2. Convergent Validity

The convergent validity test is the third stage in conducting an outer model analysis. In conducting *construct validity* testing, or *convergent validity*, the average value of the variance extracted (AVE) is used as a reference. Variables can be declared valid as measured by indicators if they have an AVE value of more than 0.50 (Hair *et al.*, 2019). The test results are shown in the table below

Table 2. Nilai Average Variance Extracted

Variabel	Average Variance Extracted (AVE)	Result
<i>Resilience Skill</i>	0.620	Valid
Teamwork Efficiency	0.690	Valid
Work Engagement	0.656	Valid
Work Performance	0.684	Valid

The data in Table 2 above shows that the AVE value of the variables in this research model is > 0.50, which meets the validity requirements (Hair *et al.*, 2019). The largest AVE value is worth 0.690, and the smallest is worth 0.620. Thus, the indicators in this research model are considered valid to measure their respective constructs simultaneously.

Discriminant Validity

The fourth stage in the *analysis of the outer model* is the validity test, which looks at the *discriminant validity* in the model (Hair *et al.*, 2019). The validity test is carried out to find out whether a construct or variable has indicators that have been well discriminated against to measure the construct specifically. The method used assesses the *heterotrait-monotrait ratio (HT/MT)*. Using the HT/MT ratio, this *discriminant validity* value is considered more precise for discriminant testing when compared to the *Fornell-Larcker* value already known and used first (Henseler *et al.*, 2014). The requirement for a reference value of the HT/MT ratio is less than 0.9 to be able to say that a construct has validly discriminated

indicators, so that it can be interpreted that the indicators on one variable have been able and specific to measure that construct (Henseler *et al.*, 2014).

Table 3. HT/MT Ratio Value

Variable	<i>Resilience Skill</i>	<i>Teamwork Efficiency</i>	<i>Work Engagement</i>	<i>Work Performance</i>
<i>Resilience Skill</i>				
Teamwork Efficiency	0.808			
Work Engagement	0.828	0.856		
Work Performance	0.890	0.861	0.877	

Based on table 3 above, by looking at the *heterotrait ratio (HT/MT)* value of each variable, it was found to be less than 0.9 so that it can be concluded that the value of the *discriminant validity* test results of all indicators in this research model has been well discriminated so that it can be used to measure their respective constructs. It can be said that the indicators in this research model have precisely or specifically measured their respective constructs.

Based on the results of the evaluation of the four parameters of reliability and validity testing on *the outer model*, respectively, *namely indicator reliability* (by looking at *outer loading*), *construct reliability* (by looking at *Cronbach's alphe* value and *composite reliability*), *construct validity* (by looking at the *average variance value extracted* or AVE), and *discriminant validity* (by looking at the *value of the heterotrait-monotrait* ratio), it can be concluded that the measurement model of this study has reliable and valid indicators to measure the respective constructs specifically, so that with these results, this stage of research is qualified to proceed to the next stage of analysis, namely *Internal Model Test*. In accordance with the recommendations of Sarstedt *et al.* (2022), in the *fit model*, the value that can be used is *the standardized root mean square residual (SRMR)*. This value describes the results of the transformation of *the sample covariance matrix* and *the predicted covariance matrix* into a *correlation matrix*. SRMR is defined as the difference between the *observed correlation* and the *implied correlation matrix model*. The expected value for SRMR is <0.08 (Hu & Bentler, 1999). Values greater than 0.08 illustrate a misconception of modeling (Henseler *et al.*, 2014). The *output results* of the *algorithm* found that the SRMR value in the *saturated model* and *the estimated model* was 0.066, so it can be said that this model has met the model's suitability (*model fitness*). Therefore, these measurements are considered feasible for testing structural models.

Structural Model (Inner Model)

The internal model analysis test aims to assess the relationship between a research model's latent variables (constructs). At the stage of internal model analysis, a one-tailed hypothesis test was carried out according to the proposed hypothesis (Hair *et al.*, 2019). The PLS-SEM hypothesis test was carried out using the resampling or bootstrapping method using SmartPLS® software. The bootstrapping is a non-parametric procedure that uses resampling techniques to test significance and coefficients (Shmueli *et al.*, 2019). Before testing the hypothesis, in the output/results of the internal test of the model, it is necessary to assess and report the quality of the proposed research model in an empirical test. The model quality parameters used in the inner model are variance inflation factor (VIF), R², f², Q², and Q²-predict (Hair *et al.*, 2019). This is useful for explaining the

explanatory and predictive capabilities of the proposed research model. Then, significance testing is carried out to determine whether the hypothesis can be supported.

At the end of the data analysis, an importance-performance analysis based on data from SmartPLS® IPMA was added using the total effect value on the target construct and the mean data from the respondents' answer results. IPMA analysis contributes to providing input for HR management to compile a priority scale to maintain, improve, and improve performance to achieve organizational goals, ultimately

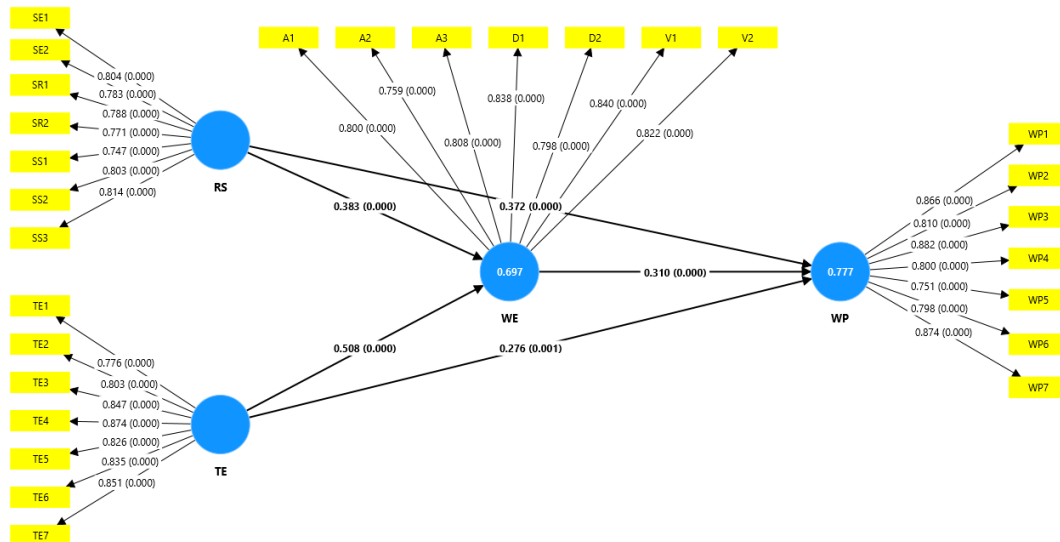


Figure 2. Inner Model

The bootstrapping results in the inner model image above show a research model with one dependent variable, one mediation variable, and nine independent variables. Through the inner model image, there are T-statistic values from ten paths in this research model. This T-statistic value describes a significant relationship, provided that the T-statistic value is above the T-table value. The stages and detailed explanations of the results of the inner model, based on the stages recommended by Hair et al. (2019), start from the assessment of the quality of the model needed as an equivalent of matching measurement as in the covariance-based method.

Hypothesis Test Results

In structural model analysis, the advanced stage that is the focus, which is also useful for answering research questions, is through a significance test on the ten paths in this research model. At this stage, the main goal is to determine the significance of the influence between variables in the research model so that it can be generalized at the population level. This test was carried out using the bootstrapping method using resampling and processed with SmartPLS® 4.1.0.9 (Ringle & Sarstedt, 2016). The results of this hypothesis test can be assessed by looking at two values of empirical test results, namely significance values and coefficient values. The direction of the coefficient must be in accordance with the direction in the proposed hypothesis because the nature of this hypothesis is directional, so a one-tailed test is carried out. Suppose the T-statistic resulting from bootstrapping is greater than the value of the T-table, which is 1.645 (with an alpha

of 0.05). In that case, the relationship between these variables can be significant (Ringle et al., 2015). This research model was analyzed using a one-tailed hypothesis test with a significance level of 0.05. After seeing the significance, it is followed by assessing how large the standardized coefficient is in each path. The research hypothesis can be supported if the test results meet both conditions.

Table 4. Hypothesis Test Results

	Variabel	Std. Coefficient	T statistics	95% CI	P values	Result
H1	Resilience Skill -> Work Engagement	0.383	4.165	0.215 - 0.514	0.000	Significant
H2	Resilience Skill -> Work Performance	0.372	4.606	0.225 - 0.491	0.000	Significant
H3	Teamwork Efficiency -> Work Engagement	0.508	5.764	0.383 - 0.673	0.000	Significant
H4	Teamwork Efficiency -> Work Performance	0.276	3.164	0.160 - 0.444	0.001	Significant
H5	Work Engagement -> Work Performance	0.310	4.102	0.185 - 0.435	0.000	Significant

Based on the table of hypothesis test results above, it can be seen that of the five hypotheses used in the tested research model, it was found that all of them had coefficient values that were in accordance with the hypothesis and had significant value. Therefore, it can be concluded that all five hypotheses are supported. The description for each hypothesis will be explained below.

The Effect of Resilience Skills on Work Engagement

It can be concluded that based on the results of the analysis, the H1 hypothesis is supported. This hypothesis is supported by the results of the T-statistics of 4.165, where the expected value for one-tailed with a significance level of 0.05 is greater than the T-table value of 1.645. The second data point is a standardized coefficient value that was found to be positive, 0.383, with a 95% confidence interval (CI) between 0.215 and 0.514 (greater than 0). The p-value results also show a number of <0.05, indicating that this analysis's results are significant. This positive direction has corresponded to the specified direction. This shows that doctors guarding more resilient emergency departments tend to be more involved in their work. These findings align with recent research by Dawkins et al. (2019) and Gupta et al. (2021), which highlight that resilience allows individuals to cope with stress more effectively, thereby increasing their levels of work engagement. Resilience includes a set of adaptive skills, including emotion regulation, problem-solving, support of those around you, and optimism, which are especially important in high-stress situations.

Emergency physicians often face unexpected and traumatic scenarios that can lead to emotional exhaustion and burnout. Those who are equipped with resilience skills will be better able to face these challenges, maintaining focus and commitment to their roles. The doctors showed high job satisfaction and increased discretionary efforts, improving patient care outcomes. This relationship

underscores the importance of resilience training programs in healthcare organizations, not just medical skills training, aiming to strengthen healthcare providers and mentally create a healthier work culture.

The Effect of Resilience Skills on Work Performance

The results of the H2 hypothesis analysis also show that it is similar to H1, which is supported. This hypothesis is the result of analysis in the form of T-statistics of 4,606, where the expected value for one-tailed with a significance level of 0.05 is greater than the T-table value of 1,645. The second data point is a standardized coefficient value that was found to be positive, 0.372, with a 95% confidence interval (CI) between 0.225 and 0.491 (greater than 0). The p-value results also show a number of <0.05 , indicating that this analysis's results are significant. This positive direction has corresponded to the specified direction.

This supports the H2 hypothesis that resilient individuals tend to perform better at their jobs. These findings align with research conducted by Dumont et al. (2020) and Meyer et al. (2022), who argue that resilience contributes to improved performance by allowing individuals to bounce back from setbacks and maintain productivity. In emergency medicine, when doctors are often faced with life-and-death situations, the ability to stay afloat can directly affect the patient's final outcome. Tough emergency physicians tend to show higher competence, motivation, and perseverance, which are important qualities in delivering quality services. For example, a formidable doctor can quickly recover strength after facing a difficult case, learn from mistakes, and apply that knowledge to future situations. This proactive approach improves their performance and positively impacts their team's performance. Additionally, the ability to effectively manage stress can reduce the likelihood of burnout, thus maintaining a high level of performance over time. These findings suggest that fostering resilience benefits individual physicians and can improve team performance and overall patient care.

The Effect of Teamwork Efficiency on Work Engagement

With the results of the analysis showing a T-statistic of 5.764, a standardized coefficient that was found to be positive of 0.508 with a 95% confidence interval (CI) between 0.383 – 0.673, and the p-value results also showed a number of <0.05 , it can be concluded that the H3 hypothesis is supported.

The positive relationship between teamwork efficiency and work engagement suggests that effective collaboration among team members fosters a more engaged workforce. These findings align with research conducted by Bakker et al. (2020) and Schmidt et al. (2021), which emphasizes the importance of teamwork in increasing engagement rates in high-risk environments. In emergencies, when the stakes are high and time is often limited, efficient teamwork can create common goals and friendships, thus increasing overall engagement. Emergency physicians rely heavily on their peers for support, information sharing, and decision-making. When team members feel they can depend on each other, it fosters trust and increases engagement rates.

A team with shared efficiency is characterized by strong communication, mutual respect, and a commitment to collective goals, all of which improve team

performance. Additionally, a collaborative environment reduces feelings of isolation among physicians, which can be especially beneficial in the emotionally taxing field of emergency medicine. This underscores the need for institutions to encourage teamwork through training and development initiatives and the creation of an organizational culture that values collaboration and mutual support.

The Effect of Teamwork Efficiency on Work Performance

The H4 hypothesis shows supported results, as evidenced by the T-statistics of 3.164, the standardized coefficient that was found to be positive is 0.276 with a 95% confidence interval (CI) between 0.160 – 0.444, and the p-value results also show a figure of <0.05. The significant positive link between teamwork efficiency and work performance (H4) further highlights the important role of effective teamwork in achieving optimal results. This aligns with the findings of Cohen & Bailey (2022) and Klein et al. (2023), who found that teams that collaborate effectively are more likely to achieve higher performance levels. In the context of emergency physicians, effective teamwork can directly affect patient outcomes and the efficiency of care delivery. For example, when team members communicate openly, share information seamlessly, and support each other, they can respond to emergencies more quickly and effectively. This not only improves individual performance but also contributes to the overall performance of the healthcare team, thereby improving the quality of services provided to patients. Additionally, effective teamwork fosters an environment where feedback is encouraged, allowing team members to learn from each other and continuously improve their practices. This collaborative learning environment can enhance problem-solving capabilities and innovation in clinical practice, benefiting patient care.

The Effect of Work Engagement on Work Performance

The last hypothesis (H5) shows supported results, with a T-statistic of 4.102, a standardized coefficient found to be positive of 0.310 with a 95% confidence interval (CI) between 0.185 and 0.435, and the p-value results also show a figure of <0.05.

This significant positive relationship underscores the important role of work engagement in driving work performance. These findings align with the work of Sonnentag & Fritz (2022) and Rich et al. (2023), which show that engaged employees tend to show better job performance, especially in challenging fields. Involved emergency physicians tend to be more attentive, proactive, and effective in their roles. Their high engagement rates often result in greater job satisfaction and lower turnover rates, critical to maintaining a stable and effective workforce in high-stress environments. Engaged employees are more likely to do more than expected in their roles, demonstrating increased commitment to patients and their colleagues. This will lead to improved patient outcomes, especially in emergency patients. This is because the physicians involved will be more likely to adhere to best practices, take initiative in problem-solving, and maintain a high standard of care. Organizations that prioritize employee engagement tend to see considerable benefits in performance metrics and overall employee well-being and satisfaction.

CONCLUSION

This study has provided valuable insights into the intricate relationship between resilience skills, teamwork efficiency, work engagement, and work performance among emergency department doctors in Banten Province, Indonesia, confirming that resilience and teamwork efficiency are critical competencies in high-pressure medical environments, as they significantly enhance work engagement, which in turn positively affects work performance. The findings highlight the necessity for healthcare organizations to implement mental health and resilience training programs to equip physicians for emergency care's emotional and psychological demands, while simultaneously fostering an environment that promotes teamwork and efficiency, which is essential for effective collaboration and superior patient care. Additionally, the mediating role of work engagement has been identified as a key factor amplifying the impact of resilience and teamwork on work performance, underscoring the need for hospital leaders to prioritize engagement-enhancing strategies to achieve optimal patient outcomes. This study's predictive model demonstrated that indirect effects through work engagement are more impactful on work performance than direct effects, particularly with teamwork efficiency showing a strong influence on engagement levels, while resilience skills exert a moderate influence. For future researchers, it is recommended to expand this study by incorporating longitudinal data to observe changes in engagement and performance over time, as well as exploring additional variables such as organizational support, emotional intelligence, and burnout, to develop a more comprehensive understanding of factors influencing emergency physicians' performance in diverse healthcare settings.

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