Research Article

Examining the Effect of Job Stress on Job Satisfaction as Mediated by Social Support and Psychological Well-being Among Nurses in Army Hospitals

Rudy Dwi Laksono*, Anwar Sanusi, and Syaiful Arifin

University of Merdeka Malang, Malang, Indonesia

ORCID
Rudy Dwi Laksono: https://orcid.org/0009-0002-6070-212X

Abstract.
This study examined the mediation of social support and psychological well-being in the impact of occupational stress on job satisfaction among nurses working in army hospitals. A quantitative methodology via an online survey was employed. The sample comprised 202 nurses randomly selected from four army hospitals in West Java. The research tool utilized was a questionnaire with four scales: the work stress scale, the social support scale, the psychological well-being scale, and the job satisfaction scale. The data were analyzed using bootstrap methodologies and mediation analysis approaches. Findings demonstrated that occupational stress negatively affects nurses' job satisfaction in army hospitals, either directly or indirectly. Social support and psychological health serve as mediating factors. By receiving social support and maintaining psychological health, nurses in army hospitals can experience increased job satisfaction and reduced stress. This study contributes to the existing body of knowledge on workplace stress and job satisfaction by focusing on the unique challenges and pressures faced by nurses in army hospitals compared to other healthcare workers. It also offers recommendations for practitioners to enhance the welfare and job satisfaction of nurses in army hospitals. These include providing adequate facilities, incentives, training, and career development opportunities, as well as fostering a conducive, harmonious, and collaborative work environment.

Keywords: job stress, social support, psychological well-being, job satisfaction, nurse, army hospital

Corresponding Author: Rudy Dwi
Laksono; email:
rudydwilaksono@fk.unjani.co.id

1. Introduction

Job stress is a condition in which individuals experience an imbalance between the demands of their jobs and their capacity to handle those demands [1]. Workplace stress can negatively impact employees' physical and emotional health, productivity, and the quality of their work [2]. Nurses, especially those working in army hospitals, are one profession particularly prone to workplace stress. Army hospitals require nurses to care for both civilian and military patients, some of whom may have been injured

or traumatized during hostilities. In addition to adjusting to various work settings from general hospitals, nurses in army hospitals must also familiarize themselves with military culture, hierarchy, and disciplinary practices [3].

The levels of job satisfaction among nursing staff members may be impacted by the stress they face while working in army hospitals. Job satisfaction is an emotional response that reflects how an employee feels about their job overall or about specific job-related aspects [4].

Job satisfaction is one of the key metrics for measuring employee and organizational well-being. Increased job satisfaction can lead to higher worker commitment, loyalty, motivation, performance, and health, as well as reduce turnover, absenteeism, conflicts, and complaints [5]. On the other hand, job dissatisfaction may result in unproductive behaviors such as theft, violence, or sabotage [6].

Improving the social support and psychological well-being of nurses in army hospitals is one method to lessen the detrimental effects of job stress on job satisfaction. Social support refers to the type of interpersonal assistance individuals might receive from others, including friends, family, colleagues, or superiors [7]. Social support might take the form of advice, information, or emotional support. It can assist individuals in coping with work stress in two different ways: first, by offering feedback, suggestions, or problem-solving assistance (problem-focused support); and second, by providing empathy, admiration, or recognition that can help the person release emotional tension or boost self-esteem (emotion-focused support) [1]. The use of social support can greatly lessen a nurse's stress response [8]. Improved mental and physical health, along with increased social support, can reduce vulnerability to the effects of stressful events [9].

Psychological well-being is a state in which the individual experiences happiness and balance in their life [10]. Six factors can be used to assess an individual's psychological well-being: autonomy (the individual's ability to regulate themselves according to their values), mastery of the environment (the individual's ability to control and utilize the resources of their environment), personal growth (the individual's ability to develop their potential and abilities), positive relationships with others (the individual's ability to establish warm, trusting, and mutually helpful relationships with others), life purpose (the individual's ability to have direction and meaning in their life), and self-acceptance (the individual's ability to accept themselves with all their strengths and weaknesses) [11].

Workplace stress and job satisfaction can be mediated by social support and psychological well-being. A mediating variable is one that explains the relationship between independent and dependent variables. Social support can act as a mediator between job stress and job satisfaction by reducing the negative effects of job stress on psychological well-being, which in turn positively impacts job satisfaction. In other words, social support can create a beneficial cycle that enhances nurses' psychological health and sense of fulfillment at work. Numerous studies, such as those conducted by Mensah [12], Kundi [13], and Hamaideh [14] provide evidence to support this concept.

Work stress in high-pressure environments like military hospitals impacts the physical and emotional health of nurses, thereby affecting their productivity and personal health. Addressing the causes of stress is critical to employee and organizational well-being. Improving social support and psychological well-being can reduce the adverse effects of work stress, improving nurses' mental and physical health. This dual approach creates a supportive and productive work environment, reducing stress and increasing overall job satisfaction for nurses in demanding environments.

This research investigates job stress and its impact on nurses in army hospitals, focusing on social support and psychological well-being as mediators. It aims to identify stressors, assess their effects, and explore how improved support can enhance job satisfaction and overall well-being.

2. Methods

2.1. Types of research

An online survey was employed in this study's quantitative methodology. The purpose of this study was to investigate the association between job stress and job satisfaction among nurses working in military hospitals, as well as the mediating effects of social support and psychological well-being.

2.2. Population and sample

The participants in this study were nurses working in Indonesian army hospitals. A total of 202 nurses were randomly selected using a straightforward random procedure from four army hospitals in the West Java region to comprise the study's sample. Nurses

aged between 20 and 50 who had worked for at least one year in an army hospital and were willing to complete a research questionnaire were included in the sample.

2.3. Research instruments

The research tool used is a questionnaire with four sections, including: The first section of the questionnaire gathers demographic information of the respondents, including their gender, age, education level, employment history, and marital status.

The second section of the questionnaire uses a work stress scale created by Jamal to measure work stress [15]. The scale consists of 15 items that ask participants how frequently they encounter various stressful workplace situations, such as workload, role conflict, role ambiguity, lack of resources, and lack of appreciation. It employs a Likert scale ranging from 1 (very rare) to 5 (very frequent). The sum of the item scores yields the overall work stress score, with higher scores representing more stressful work environments.

The third section measures questions about social support using scales Sarason created for social support [16]. The 27-item scale probes respondents' satisfaction with the social support they receive from friends, family, coworkers, and superiors. It employs a Likert scale with a five-point range from 1 (extremely dissatisfied) to 5 (very satisfied). The sum of the items' scores yields the overall social support score, with higher scores representing higher levels of social support.

The fourth section of the questionnaire uses Ryff's scales for measuring psychological well-being to answer questions [17]. The scale consists of 18 items that ask respondents to rate their agreement with various statements about their psychological well-being, such as autonomy, environmental mastery, personal growth, positive interpersonal relationships, life purpose, and self-acceptance. A six-point Likert scale is used, ranging from 1 (strongly disagree) to 5 (strongly agree). The sum of the item scores yields the overall psychological well-being score. Higher scores denote higher levels of psychological well-being.

Questions about job satisfaction are found in the fifth section and are measured using Locke's compilation of job satisfaction scales [4]. The 15-item scale probes respondents' satisfaction with a range of job-related factors, including pay, benefits, working conditions, interpersonal relationships, career opportunities, and self-development. It employs a Likert scale with a five-point range from 1 (extremely dissatisfied) to 5 (very

satisfied). The sum of the item scores yields the overall score for job satisfaction. An increased score reflects greater job satisfaction.

The questionnaire was first tested on 30 nurses working in army hospitals who were not part of the study sample before being used to collect data. The trial's findings demonstrated that the questionnaire had good validity and reliability and was simple for respondents to understand and complete.

2.4. Data analysis techniques

Utilizing techniques for mediation analysis, the survey data were examined. Job stress is the independent variable, and social support and psychological well-being are the mediating variables. The purpose of mediation analysis is to determine whether these factors can explain the mechanisms or processes underlying the relationship between job stress and job satisfaction. Analysis was conducted using SPSS version 25 and SmartPLS version 3.0 to analyze mediation.

3. Hypothesis

The following is the study's hypothesis (Figure 1):

H1: Job stress negatively affects job satisfaction in nurses in army hospitals.

H2: Work stress negatively affects social support in nurses in army hospitals.

H3: Work stress negatively affects the psychological well-being of nurses in army hospitals.

H4: Social support positively affects job satisfaction in nurses in army hospitals.

H5: Psychological well-being positively affects job satisfaction in nurses in army hospitals.

H6: Social support mediates the relationship between job stress and job satisfaction in nurses in army hospitals.

H7: Psychological well-being mediates the relationship between job stress and job satisfaction in nurses in army hospitals.
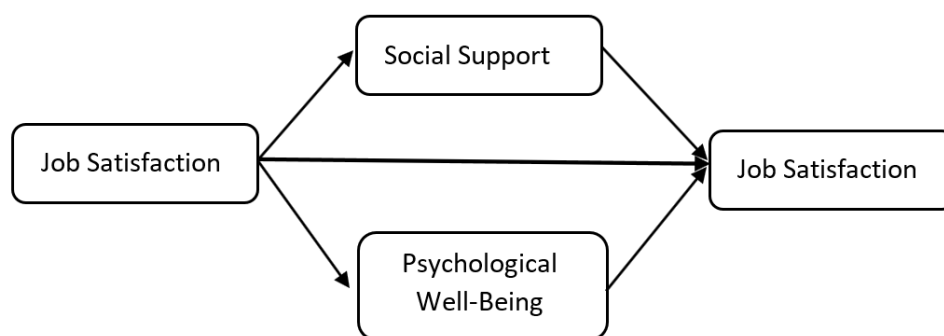
Figure 1: Research model.

4. Research Results

4.1. Description of statistics

The study's variables, including job stress, social support, psychological well-being, and job satisfaction, are statistically described in Table 1. Each variable's average, standard deviation, minimum, and maximum values are listed in this table. The average work stress value of 48.35 indicates that respondents reported experiencing a fair amount of work stress. The average level of social support was 81.25, which suggests that respondents were content with the level of social support they had. The respondents had a moderate level of psychological well-being, as evidenced by the average psychological well-being score of 69.15. The average job satisfaction score among respondents is 54.10, indicating that they are generally satisfied with their jobs.

TABLE 1: Statistical description of research variables.

Variable	Average	Standard Deviation	Minimum	Maximum
Job stress	48.35	9.87	23	75
Social support	81.25	12.34	45	108
Psychological well-being	69.15	10.56	38	96
Job satisfaction	54.10	8.76	29	75

4.2. Test assumptions

An assumption test is conducted before beginning mediation analysis to ensure the data meets the requirements for a hypothesis test. Normality tests, multicollinearity tests, and homoscedasticity tests are examples of assumption tests.

The Kolmogorov-Smirnov and Shapiro-Wilk methods were used to perform the normality test. The results indicate that all variable values are greater than 0.05, which means there is insufficient evidence to refute the null hypothesis that the data are normally distributed.

Utilizing the Variance Inflation Factor (VIF) and Tolerance methods, the multicollinearity test was conducted. The results indicate that there is no multicollinearity between the variables because the VIF value for all variables is less than 10 and the Tolerance value for all variables is greater than 0.1.

A multiple linear regression model between independent and dependent variables' standard predicted and residual values was compared using the scatterplot method to determine the homoscedasticity of the data. The homoscedasticity test results reveal that the scatterplot has no discernible pattern, indicating that the homoscedasticity assumption is met.

4.3. Mediation analysis

The SmartPLS ver. 3.0 program was used to conduct a mediation analysis. Table 2 displays the findings of a mediation analysis of the relationship between job stress and job satisfaction among nurses working in army hospitals using the mediating variables of social support and psychological well-being.

TABLE 2: Validity and reliability of variables.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Social Support	0.820	0.943	0.871	0.635
Job Satisfaction	0.979	0.980	0.982	0.873
Psy Well Being	0.953	0.941	0.876	0.787
Job Stress	0.973	0.974	0.982	0.949

This table shows that the correlation between work stress and social support is -0.666 (significant at 0.05), implying that social support will decline by 66.6% for every unit increase in work stress. Workplace stress is estimated to harm psychological health by -0.325 (significant at 0.05), meaning psychological well-being will decline by 32.5% for every unit increase in work stress. It was determined that social support has a 0.294 (significant at 0.05) impact on job satisfaction, implying that job satisfaction will rise by
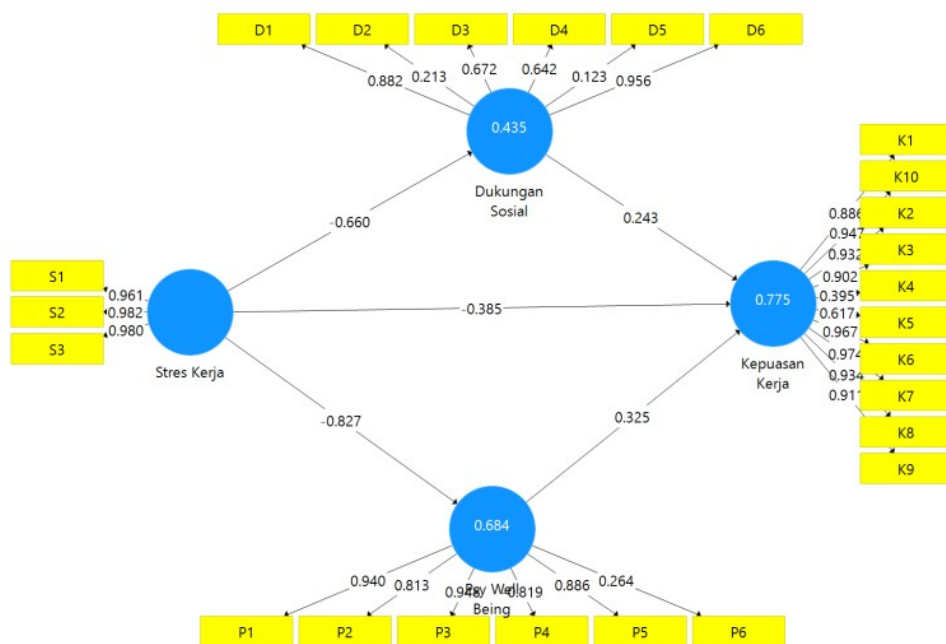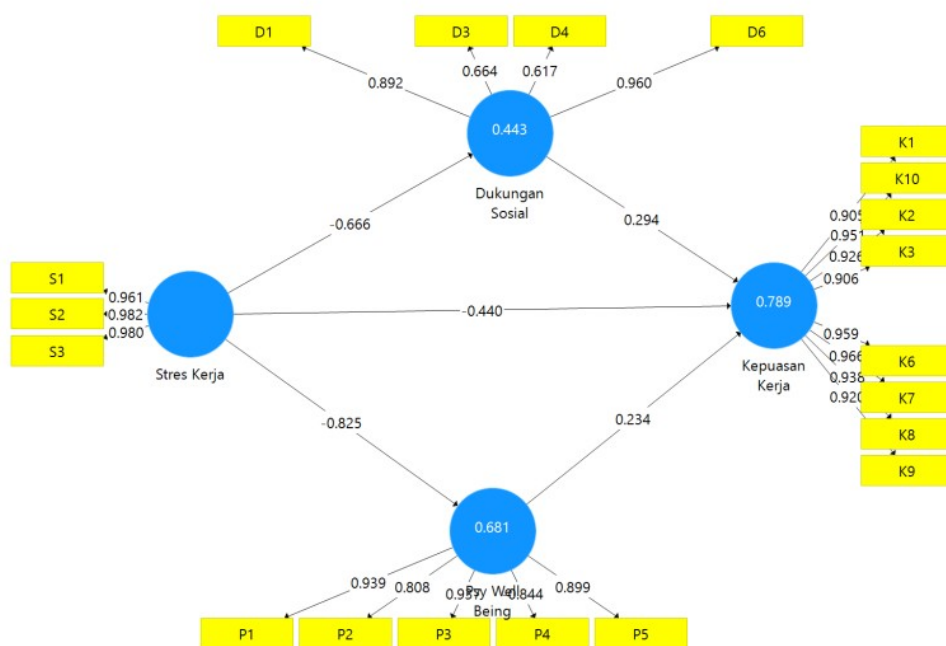
Figure 2: First test.

Figure 3: Second test.

29.4% for every unit increase in social support. The value for the relationship between psychological well-being and job satisfaction was 0.234 (significant at 0.05), indicating

that job satisfaction will rise by 23.4% for every unit increase in psychological well-being (see Figure 2 and Figure 3).

The direct relationship between job stress and job satisfaction is -0.440 (significant at 0.05), indicating that for every unit increase in job stress, job satisfaction will fall by 44%. The indirect effect via the mediating factor of social support was -0.201 (less significant than the direct impact of work stress on job satisfaction), and the indirect effect on psychological well-being was -0.226. This means that even after accounting for the mediation variable's effect, there was still a negative impact of work stress on job satisfaction, albeit one that was less significant than the direct effects of both mediating variables, namely social support and psychological well-being.

TABLE 3: Hypothesis test results.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Social Support -> Job Satisfaction	0.294	0.298	0.085	3.440	0.001
Psy Well-Being -> Job Satisfaction	0.234	0.267	0.163	1.436	0.015
Job Stress -> Social Support	-0.666	-0.672	0.046	14.590	0.000
Job Stress -> Job Satisfaction	-0.440	-0.403	0.150	2.939	0.003
Job Stress -> Psy Well Being	-0.825	-0.828	0.043	19.303	0.000

TABLE 4: Test the effects of mediation.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Job stress -> Social Support -> Job satisfaction	-0.196	-0.201	0.062	3.159	0.002
Job stress -> Psy Well Being -> Job satisfaction	-0.193	-0.226	0.145	1.336	0.012

This table 3 shows that social support has a mediating effect on the relationship between job stress and job satisfaction. Its value is -0.196 with a significance level of 0.002, according to the data. This indicates that social support mediates a negative relationship between job stress and job satisfaction and that the mediating effect is statistically significant.

The relationship between job stress and job satisfaction was mediated by psychological well-being, with an estimated effect of -0.193 and a significance level of 0.012 (table 4). Therefore, the relationship between job stress and job satisfaction is negatively mediated by psychological well-being, indicating that this mediating effect is both statistically significant and negative.

5. Discussion

This study examined the mediating effects of social support and psychological well-being on the impact of job stress on job satisfaction among nurses in army hospitals. The findings revealed that job stress negatively affects nurses' job satisfaction, either directly or indirectly. This suggests that higher levels of work-related stress correspond to lower job satisfaction among nurses. This concept aligns with the theory of work stress, which posits that stress can have various adverse effects on employees, including decreased performance, motivation, commitment, and health [18-20].

Social support and psychological health serve as mediating factors, shedding light on the manner in which job stress influences job satisfaction in army hospital nurses. These mediators help mitigate some of the harmful effects of job stress on job satisfaction. Enhanced job satisfaction and reduced stress among nurses can be achieved through social support and the maintenance of psychological health. This is consistent with the theory of social support, which asserts that interpersonal resources such as assistance, advice, appreciation, and empathy can aid individuals in coping with stress [7,21,22]. Furthermore, it corroborates the psychological well-being theory, which defines psychological well-being as a state characterized by happiness and life balance, influenced by six dimensions: autonomy, environmental mastery, personal growth, positive relationships with others, life goals, and self-acceptance [10,23].

The study's outcomes are in agreement with previous research that found a correlation between work stress and job satisfaction via the mediating effects of social support and psychological well-being in various professional sectors, including teachers [12], bank employees [13], and nurses [3,14]. This study enriches the existing literature by concentrating on the distinct context of nurses in army hospitals, who encounter challenges and pressures different from those in other workplaces.

It is crucial to acknowledge the limitations of this study. Initially, the research utilized a survey methodology with questionnaires as the primary instrument, which may limit the

generalizability of the findings to a broader population due to potential external validity constraints. This method also presents challenges in establishing causal relationships due to internal validity limitations. Secondly, the modest sample size (202 nurses), predominantly female, may affect the representativeness and diversity of the data. Third, the study's focus on only four variables—job stress, social support, psychological well-being, and job satisfaction—may not encompass all factors influencing the phenomenon under study. Consequently, the results should be interpreted cautiously and not generalized indiscriminately.

Based on the study's findings and limitations, several recommendations are proposed. Future research should incorporate more robust methodologies, such as experimental or case studies, to establish causality between variables. A larger, more diverse sample is also recommended to better represent the nursing workforce in army hospitals. Practitioners should aim to enhance the welfare and job satisfaction of nurses by providing adequate facilities, rewards, training, and career development opportunities. Additionally, it is suggested to create a collaborative work environment for nurses, doctors, patients, and other stakeholders. Moreover, nurses should be encouraged to develop advanced stress management, communication, and problem-solving skills, and to maintain their physical and mental health through healthy activities like sports, hobbies, meditation, or counseling.

6. Conclusions and Suggestions

6.1. Conclusion

In conclusion, this research's mediation analysis reveals that in army hospitals, job stress negatively influences nurses' job satisfaction both directly and indirectly. Social support and psychological well-being serve as crucial mediators that not only elucidate this relationship but also assist nurses in coping with job stress, thereby enhancing their job satisfaction.

6.2. Suggestion

Based on comprehensive research into the impact of job stress on nurses in army hospitals, several strategic recommendations have been formulated to enhance their welfare and job satisfaction. Firstly, it is imperative for these hospitals to bolster the

welfare of their nursing staff by ensuring the provision of adequate facilities, offering incentives, and facilitating continuous training and career development opportunities. Such measures are crucial for empowering nurses and equipping them with the necessary tools and skills to excel in their demanding roles.

Secondly, creating a conducive, harmonious, and collaborative work environment is essential. This involves nurturing positive interactions and teamwork among nurses, doctors, patients, and other hospital staff to create a supportive and efficient care environment. Thirdly, the importance of robust social support systems cannot be overstated. It is vital for nurses to receive the necessary support from superiors, colleagues, and family members to help them manage the complex emotional and physical demands of their work.

Furthermore, it is recommended that nurses proactively seek to enhance their stress management, communication, and problem-solving skills. Such competencies are invaluable for managing the day-to-day pressures inherent in an army hospital setting. In addition to professional skills, personal well-being is paramount. Nurses should be encouraged to engage in activities that promote their physical and mental health, such as regular exercise, pursuing hobbies, practicing meditation, or seeking counseling when needed.

he findings of this research provide a roadmap for improving the working conditions and well-being of nurses in army hospitals. It is hoped that these suggestions, when implemented, will improve not only the lives of the nurses but also the quality of care they provide to their patients. This research is dedicated to all those who strive to make healthcare environments more supportive and effective. May these insights contribute to a brighter, healthier future for both caregivers and those they serve.

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