



Factors Associated with Job Satisfaction and Self-Efficacy Among Nurses in Community Health Centers: A Cross-Sectional Study in Tanjungpinang City

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ARTICLE INFO

Article history:

Received 25 February 2026

Revised 25 June 2026

Accepted 26 July 2026

Available online

<https://talenta.usu.ac.id/IJNS>

E-ISSN: 2685-7162

How to cite: Ayu, N.M.S., Zuraidah, Rahayu, F.S., Ernawati, Arianingsih, T. (2026). Factors associated with job satisfaction and self-efficacy among nurses in community health centers: a cross-sectional study in Tanjungpinang city. *Caring: Indonesian Journal of Nursing Science*, 8(1), 151-158.

ABSTRACT

Low levels of nurse's job satisfaction and self-efficacy may reduce productivity, increase occupational stress, compromise the quality of patient care, and contribute to turnover intention. Identifying factors associated with job satisfaction and self-efficacy is therefore essential for strengthening nursing workforce management and improving healthcare outcomes. This study aimed to examine factors associated with job satisfaction and self-efficacy among nurses working in community health centers in Tanjungpinang City. A quantitative cross-sectional study was conducted among 92 nurses selected from a population of 120 using proportionate stratified random sampling based on the Slovin formula with a 5% margin of error. Data were collected using validated structured questionnaires and analyzed using Spearman's rank correlation test. Among the 92 respondents, 70 (76.1%) reported high job satisfaction, while 67 (72.8%) demonstrated high self-efficacy. Interpersonal relationships ($p < 0.001$, $r = 0.670$) and social support ($p = 0.001$, $r = 0.550$) were significantly associated with job satisfaction, whereas workload was not significantly associated with job satisfaction ($p = 0.904$, $r = -0.022$). Verbal persuasion ($p = 0.009$, $r = 0.447$) and personal experience ($p < 0.001$, $r = 0.690$) were significantly associated with nurses' self-efficacy. Organizational and psychological resources play a crucial role in enhancing nurses' job satisfaction and self-efficacy. Nursing managers should prioritize evidence-based human resource management strategies that strengthen organizational support, enhance positive interpersonal relationships, expand mentoring and constructive feedback mechanisms, and promote continuous competency-based professional development to improve nurses' performance.

Keyword: Job Satisfaction, Self-efficacy, Nurses, Community Health Centers



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<https://doi.org/10.32734/ijns.v8i1.24841>

1. Introduction

Human resources constitute the most valuable asset in healthcare organizations, as the quality of healthcare services largely depends on the competence, motivation, and psychological well-being of healthcare professionals. Healthcare facilities play a fundamental role in delivering promotive, preventive, curative, and rehabilitative services to individuals and communities (Abas et al., 2019; Dewi et al., 2023). In Indonesia, community health center serve as the cornerstone of the primary healthcare system, providing comprehensive services that encompass health promotion, disease prevention, treatment, and rehabilitation. Therefore, maintaining a competent, motivated, and resilient nursing workforce is essential to ensure equitable, accessible, and high-quality healthcare services. The World Health Organization (WHO, 2023) emphasizes that a well-supported health workforce is critical to achieving universal health coverage and improving population health outcomes. Similarly, the Indonesian Ministry of Health (2024) highlights the strategic role of nurses in strengthening primary healthcare services and enhancing the quality and continuity of patient care. Furthermore, recent evidence indicates that organizational factors within primary healthcare settings, including supportive leadership, effective teamwork, and opportunities for professional development, significantly influence nurses' performance, job satisfaction, and patient outcomes (WHO, 2023; Indonesian Ministry of Health, 2024).

According to the Job Demands–Resources (JD–R) theory, employee performance and well-being are influenced by the balance between job demands and job resources. Excessive job demands can diminish job satisfaction and performance, whereas adequate organizational resources, including supportive work environments, positive interpersonal relationships, and opportunities for professional development, enhance employee motivation, job satisfaction, and work performance (Bakker & Demerouti, 2023). In nursing practice, performance reflects the quality and effectiveness of patient care and is closely associated with job satisfaction and organizational commitment. Recent evidence indicates that nurses with higher levels of job satisfaction demonstrate superior clinical performance, stronger organizational commitment, and improved quality of patient care. These findings underscore the importance of fostering supportive workplace environments to optimize nurses' performance and healthcare outcomes in primary healthcare settings (Hudays et al., 2024; Kim et al., 2024).

Nurses' job satisfaction is a critical determinant of the quality of healthcare services. According to Sunarta (2019), job satisfaction encompasses multiple dimensions, including workload, relationships with coworkers, supervisory support, work–life balance, and rewards and recognition for performance. Nurses who experience higher levels of job satisfaction are more likely to demonstrate greater motivation, higher productivity, and stronger organizational commitment. These positive outcomes, in turn, contribute to improved quality of healthcare services and patient care (Kusumadewi et al., 2023).

In addition, Social Cognitive Theory posits that self-efficacy refers to an individual's belief in their capability to organize and execute the actions required to achieve desired outcomes (Bandura, 1997). Although the theory was originally developed several decades ago, recent studies continue to demonstrate that nurses' self-efficacy is primarily strengthened through mastery experiences, verbal persuasion, vicarious learning, and organizational support. These factors play a significant role in enhancing clinical decision-making, resilience, and professional performance (Klassen & Usher, 2022; Schunk & DiBenedetto, 2023).

Furthermore, Herzberg's Two-Factor Theory explains that job satisfaction is influenced by intrinsic motivational factors, including achievement, recognition, responsibility, and opportunities for professional growth, whereas job dissatisfaction is primarily associated with hygiene factors such as workload, supervision, organizational policies, interpersonal relationships, and working conditions. Contemporary healthcare research continues to support Herzberg's theory, demonstrating that supportive leadership, recognition, and collaborative work environments remain significant predictors of nurses' job satisfaction (Alrawahi et al., 2023; Lu et al., 2024).

Globally, maintaining nurses' job satisfaction has become an increasing challenge in the post-COVID-19 era. The State of the World's Nursing Report 2025 highlights that persistent workforce shortages, increasing healthcare demands, and psychosocial stress have reduced nurses' job satisfaction while increasing turnover intentions across many countries (WHO, 2025). Similarly, recent systematic reviews have demonstrated that nurses with higher self-efficacy consistently exhibit greater clinical competence, stronger organizational commitment, higher resilience, and improved patient safety performance (Shahrour et al., 2023).

In Indonesia, strengthening the quality of primary healthcare services has become a national priority through ongoing healthcare system transformation. Nevertheless, nurses working in community health center continue to face excessive workloads, limited opportunities for professional development, inadequate

organizational support, and insufficient recognition, all of which negatively affect job satisfaction and self-efficacy (Indonesian Ministry of Health, 2024). Previous studies conducted in Indonesia have generally examined job satisfaction and self-efficacy separately and have primarily focused on hospital settings. Consequently, empirical evidence investigating both organizational and psychological determinants of job satisfaction and self-efficacy simultaneously among nurses working in primary healthcare settings remains limited, particularly in the Riau Islands Province.

National evidence also indicates that healthcare workers in Indonesia report relatively low levels of job satisfaction (approximately 40–50%) and moderate levels of self-efficacy (approximately 50–60%) (Ministry of Health of the Republic of Indonesia, 2022). These conditions are closely associated with unfavorable working conditions and reduced psychological well-being (Fitriyana & Khasanah, 2020). According to the Job Demands–Resources (JD–R) theory, an imbalance between high job demands and limited job resources can reduce employees' psychological well-being, work engagement, and job satisfaction. Conversely, adequate job resources—including supportive leadership, positive interpersonal relationships, effective communication, and opportunities for professional development can enhance both job satisfaction and self-efficacy (Bakker & Demerouti, 2023). Recent systematic reviews further indicate that excessive workload, limited organizational support, inadequate supervision, poor interpersonal relationships, and restricted opportunities for continuing professional development are consistently associated with lower job satisfaction, higher burnout, and poorer quality of work life among nurses. Conversely, supportive work environments and effective clinical supervision significantly enhance nurses' confidence, resilience, professional commitment, and quality of patient care (Hudays et al., 2024; Sibuea et al., 2024). Moreover, organizational trust, effective communication, and positive workplace relationships have been identified as key predictors of nurses' job satisfaction, underscoring the importance of creating healthy organizational climates within primary healthcare settings.

A preliminary study conducted in July 2024 at community health centers in the Kampung Bugis service area of Tanjungpinang City identified several organizational and individual factors that may influence nurses' job satisfaction and self-efficacy. Among ten randomly selected nurses, 70% reported excessive workloads, 80% perceived inadequate social support, 60% experienced poor interpersonal relationships, 50% believed that greater clinical experience was necessary to improve their confidence, 70% rarely received constructive feedback, and 80% reported limited access to training and professional development opportunities. These preliminary findings suggest that both organizational resources and individual psychological factors may substantially influence nurses' job satisfaction and self-efficacy.

Therefore, this study aims to examine the factors associated with nurses' job satisfaction and self-efficacy among nurses working in community health centers throughout Tanjungpinang City. Specifically, the study investigates six organizational and individual factors identified during the preliminary assessment: workload, social support, interpersonal relationships, clinical experience, constructive feedback, and professional development opportunities. Although previous studies have examined individual determinants of either job satisfaction or self-efficacy, research simultaneously investigating these organizational and psychological factors in primary healthcare settings remains limited, particularly in Indonesia. By addressing this gap, the present study is expected to provide evidence-based recommendations for healthcare managers and policymakers to strengthen organizational support and develop strategies that enhance nurses' job satisfaction, self-efficacy, and ultimately the quality of primary healthcare services.

2. Methods

This study employed a quantitative cross-sectional design. The research was conducted at all Puskesmas in Tanjungpinang City, Indonesia, from January to March 2025. The study population comprised 120 registered nurses, with 92 respondents selected using the Slovin formula (5% margin of error) through proportionate stratified random sampling. Data were collected using validated and reliable structured questionnaires measuring workload, interpersonal relationships, social support, verbal persuasion, personal experience, training and professional development, job satisfaction, and self-efficacy. Instrument validity and reliability were established before data collection. Data were analyzed using descriptive statistics and Spearman's rank correlation test to determine the relationships between the independent variables and nurses' job satisfaction and self-efficacy, with statistical significance set at $p < 0.05$. Ethical approval was obtained from the Health Research Ethics Committee of STIKes Hang Tuah Tanjungpinang (No. DP.12.01/e-KEPK.1/P4M/2025). All participants provided written informed consent prior to participation, and confidentiality and anonymity were maintained throughout the study.

3. Results

3.1. Characteristics

Table 1 shows that respondents aged 36–45 years constituted the largest age group, accounting for 56 respondents (60.9%). Most respondents were female (84; 91.3%), had a Diploma (D-III) in Nursing as their highest educational qualification (70; 76.1%), and had more than five years of work experience (78; 84.8%).

Table 1 Distribution Based on Respondent Characteristics at Community Health Centers in Tanjungpinang City (n=92)

Variables	Frequency (n)	Percentage (%)
Age		
26–35 years	28	30.4
36–45 years	56	60.9
46–55 years	8	8.7
Gender		
Male	8	8.7
Female	84	91.3
Education		
Diploma (D-III)	70	76.1
Bachelor (Ners)	22	23.9
Years of Employment		
> 5 years	78	84.8
≤ 5 years	14	15.2

3.2. Bivariate Association

Table 2 Relationship Between Workload, Interpersonal Relationships, Social Support, and Nurses' Job Satisfaction at Community Health Centers in Tanjungpinang City (n = 92)

Variables	Job Satisfaction Satisfied n (%)	Not Satisfied n (%)	Total n (%)	p-value	r
Workload					
Light	42 (75.0)	14 (25.0)	56 (100)	0.904	-0.022
Heavy	28 (77.8)	8 (22.2)	36 (100)		
Interpersonal Relationships					
Good	64 (91.4)	6 (8.6)	70 (100)	<0.001	0.670
Poor	6 (27.3)	16 (72.7)	22 (100)		
Social Support					
High	59 (90.8)	6 (9.2)	65 (100)	0.001	0.550
Low	11 (40.7)	16 (59.3)	27 (100)		

Table 2 shows that workload was not significantly associated with nurses' job satisfaction ($r = -0.022$, $p = 0.904$). In contrast, interpersonal relationships demonstrated a strong positive correlation with job satisfaction ($r = 0.670$, $p < 0.001$), with a higher proportion of satisfied nurses among those reporting good interpersonal relationships (91.4%) than poor interpersonal relationships (27.3%). Likewise, social support was positively associated with job satisfaction ($r = 0.550$, $p = 0.001$), as nurses perceiving high social support reported greater job satisfaction (90.8%) than those with low social support (40.7%).

Table 3 Relationship Between Verbal Persuasion, Personal Experience, and Nurses' Self-Efficacy at Community Health Centers in Tanjungpinang City (n = 92)

Variables	Self-Efficacy		Total n (%)	p-value	r
	High n (%)	Low n (%)			
Verbal Persuasion					
Positive	59 (84.3)	11 (15.7)	70 (100)	0.009	0.447
Negative	8 (36.4)	14 (63.6)	22 (100)		
Personal Experience					
Good self-confidence	67 (85.9)	11 (14.1)	78 (100)	<0.001	0.690
Low self-confidence	0 (0.0)	14 (100.0)	14 (100)		

Table 3. shows that verbal persuasion was significantly associated with nurses' self-efficacy ($r = 0.447$, $p = 0.009$), with higher self-efficacy observed among nurses receiving positive verbal persuasion (84.3%). Personal experience demonstrated the strongest positive correlation with self-efficacy ($r = 0.690$, $p < 0.001$), as nurses with good self-confidence predominantly reported high self-efficacy (85.9%). These findings indicate that both verbal persuasion and personal experience were significant factors associated with nurses' self-efficacy.

4. Discussion

The present study found that most respondents were between 36 and 45 years of age, indicating that the nursing workforce in community health centers is predominantly composed of experienced professionals in the middle stage of their careers. Nurses in this age group are likely to have accumulated substantial clinical experience, enabling them to demonstrate greater professional competence, emotional stability, and confidence in clinical decision-making. Recent international evidence indicates that increasing age and professional experience are positively associated with higher clinical competence, stronger organizational commitment, more effective teamwork, and improved quality of patient care, as experienced nurses are better equipped to manage complex clinical situations and adapt to workplace challenges (World Health Organization [WHO], 2025; Alrawahi et al., 2023). Furthermore, a systematic review by Shahrour et al. (2023) reported that experienced nurses generally exhibit greater resilience, higher self-efficacy, and superior professional performance than less experienced nurses, underscoring the important contribution of accumulated clinical experience to nursing practice.

Similarly, recent Indonesian studies have reported that middle-aged nurses demonstrate higher professional competence and stronger organizational commitment than younger nurses because of their accumulated clinical experience and greater confidence in clinical decision-making (Anisa & Siregar, 2024; Purnomo et al., 2024). Nevertheless, studies conducted in developed countries suggest that increasing age may also be associated with physical fatigue and occupational stress resulting from prolonged exposure to demanding clinical environments (Lu et al., 2024). Therefore, although age contributes positively to professional competence, healthcare organizations should implement age-sensitive workforce management strategies to maintain nurses' physical and psychological well-being throughout their professional careers.

The majority of respondents were female, reflecting the gender composition commonly observed in the nursing profession in Indonesia. This finding is consistent with national workforce statistics and previous Indonesian studies reporting that nursing remains a predominantly female profession (Paturohman et al., 2021). International evidence likewise indicates that gender disparities in nursing continue to reflect longstanding sociocultural perceptions linking the profession with caring, empathy, and nurturing roles (Aca et al., 2025). However, recent literature consistently emphasizes that professional competence, leadership capability, communication skills, and clinical performance are influenced primarily by education, experience, organizational support, and professional development rather than gender (WHO, 2025). Consequently, nursing workforce policies should prioritize competency-based professional development and equitable career opportunities regardless of gender.

Regarding educational background, most respondents held a Diploma (D-III) qualification. Although diploma education provides adequate competencies for primary healthcare practice, higher educational attainment has consistently been associated with stronger critical thinking skills, greater implementation of evidence-based practice, enhanced leadership competence, and improved clinical decision-making. Recent Indonesian studies have demonstrated that nurses with bachelor's and professional nursing qualifications report

higher self-efficacy and greater readiness to implement evidence-based interventions than diploma graduates (Wulandari & Rizky, 2024). These findings are consistent with Benner's Novice-to-Expert Theory, which proposes that clinical expertise develops through the interaction between formal education and accumulated professional experience.

Most respondents had worked for more than five years, indicating substantial professional experience within primary healthcare services. Previous studies have shown that longer work experience is associated with stronger organizational commitment, better interpersonal competence, and greater adaptability to workplace challenges (Pujiarti & Idealistiana, 2023; Purnomo et al., 2024). According to Benner's theory, nurses gradually progress from competence to proficiency through repeated exposure to increasingly complex clinical situations. Nevertheless, professional experience alone does not necessarily improve performance unless supported by continuous professional development, effective leadership, and organizational learning opportunities. These findings reinforce the importance of lifelong learning and competency-based human resource management in primary healthcare settings.

The present study also revealed that most nurses reported high levels of job satisfaction, suggesting that respondents generally perceived their work environment positively despite the challenges encountered in primary healthcare settings. According to Herzberg's Two-Factor Theory, job satisfaction results from the interaction between motivational factors—including achievement, recognition, responsibility, and opportunities for professional growth—and hygiene factors such as supervision, interpersonal relationships, organizational policies, workload, and working conditions. Therefore, the relatively high level of job satisfaction observed in this study may indicate that both intrinsic and extrinsic aspects of the work environment were adequately addressed. This interpretation is supported by Marquis and Huston (2024), who emphasized that effective nursing leadership, equitable workload distribution, staff recognition, supportive supervision, and continuous professional development are essential for enhancing job satisfaction and organizational performance. Likewise, Yoder-Wise (2023) argued that healthy work environments characterized by collaborative leadership, effective communication, and staff empowerment contribute to higher professional satisfaction and improved staff retention.

Recent international evidence further supports these findings. A systematic review by Välimäki et al. (2024) demonstrated that evidence-based nursing leadership positively influences nurses' performance, organizational outcomes, and the quality of patient care. Similarly, Leal Murillo et al. (2024) found that transformational leadership exhibits the strongest positive association with healthcare professionals' job satisfaction, emphasizing the importance of supportive leadership in promoting employee well-being. In addition, a recent systematic review and meta-analysis reported that higher levels of nurses' job satisfaction are associated with lower rates of missed nursing care, healthier work environments, and better patient outcomes (Aydolu Algin et al., 2024). These findings highlight job satisfaction as a key indicator of organizational effectiveness and healthcare quality. Since organizational support and positive workplace conditions also influence nurses' confidence in performing their professional roles, examining job satisfaction alongside self-efficacy provides a more comprehensive understanding of the factors contributing to nursing performance and quality of care (Bandura, 1997).

Consistent with these findings, recent Indonesian studies have demonstrated that supportive leadership, collaborative work environments, and equitable organizational policies significantly improve nurses' job satisfaction (Manalu et al., 2024; Triarso et al., 2023). Likewise, international systematic reviews have concluded that nurses working in organizations characterized by positive interpersonal relationships, supportive supervision, and professional recognition report higher job satisfaction, stronger organizational commitment, and better quality of patient care (Hudays et al., 2024; Lu et al., 2024). However, studies conducted in the post-COVID-19 period indicate that increasing workloads, workforce shortages, and psychological exhaustion continue to threaten nurses' job satisfaction, particularly in primary healthcare settings (WHO, 2025).

From a nursing management perspective, maintaining nurses' job satisfaction requires comprehensive organizational strategies rather than relying solely on financial incentives. According to Marquis and Huston (2024), effective nursing management should foster supportive work environments through transformational leadership, equitable workload distribution, transparent performance appraisal systems, continuous professional development, and effective communication. Similarly, Yoder-Wise (2023) emphasized that supportive leadership, staff empowerment, and opportunities for professional growth are fundamental components of healthy work environments that promote job satisfaction and high-quality patient care. Recent empirical evidence further demonstrates that transformational leadership, organizational support, and

collaborative workplace cultures significantly enhance nurses' job satisfaction, self-efficacy, work engagement, and retention while reducing burnout and turnover intention (Boamah et al., 2022; Hudays et al., 2024; Lu et al., 2024). Collectively, these findings suggest that nursing managers should adopt evidence-based human resource management strategies that strengthen organizational support, facilitate continuous competency development, and foster positive interpersonal relationships, thereby enhancing nurses' job satisfaction, self-efficacy, and the quality of healthcare services.

5. Conclusion

This study demonstrated that interpersonal relationships and social support were significantly associated with nurses' job satisfaction, whereas verbal persuasion, mastery experience, and training and professional development were significantly associated with nurses' self-efficacy among nurses working in community health centers in Tanjungpinang City. These findings underscore the important contribution of organizational and psychological resources to enhancing nurses' job satisfaction and self-efficacy, both of which are essential for improving workforce performance and the quality of primary healthcare services.

Limitations of this study are the cross-sectional design precludes the establishment of causal relationships among the study variables. The use of self-administered questionnaires may have introduced response bias. Because the study was conducted in community health centers within a single city, the generalizability of the findings to other primary healthcare settings may be limited. Future research should employ multicenter longitudinal or intervention-based designs to further examine and validate these relationships. From a nursing management perspective, healthcare managers should strengthen supportive leadership, promote positive interpersonal relationships and social support, implement structured mentoring and constructive feedback systems, and provide continuous competency-based professional development. These strategies may enhance nurses' job satisfaction, self-efficacy, organizational performance, and ultimately the quality of primary healthcare services.

Acknowledgment

The authors would like to express their sincere gratitude to all nurses working in community health centers throughout Tanjungpinang City who voluntarily participated in this study. The authors also gratefully acknowledge the Tanjungpinang City Health Office and STIKes Hang Tuah Tanjungpinang for their support and for providing the facilities and assistance necessary to successfully conduct this research.

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