



The Relationship Between Self-Efficacy and Work Motivation and the Level of Work-Related Stress Among Nurses in the Emergency Department

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Abstract

Emergency Department (ED) nurses face demands involving changing patient conditions, time constraints, and responsibility for patient safety, which may increase work-related stress. Self-efficacy and work motivation serve as resources that influence nurses' ability to manage demands. This study determined the relationships between self-efficacy, work motivation, and work-related stress among ED nurses. A quantitative correlational study with a cross-sectional approach was conducted among 83 ED nurses at RSUP Dr. Kariadi Semarang during June–July 2026. Data were collected with the New Job Stress Scale, General Self-Efficacy Scale, and Motivation at Work Scale, and analyzed using Spearman Rank correlation. Most respondents had moderate self-efficacy (46; 55.4%), high work motivation (71; 85.5%), and moderate work-related stress (63; 75.9%). Self-efficacy was significantly and negatively related to work-related stress ($p = 0.001$; $r = -0.369$), while work motivation showed a significant negative relationship with work-related stress ($p = 0.036$; $r = -0.231$). These findings indicate that stronger self-efficacy and work motivation are associated with lower work-related stress among ED nurses, although the weak correlations suggest that stress is also influenced by other factors. Strengthening self-efficacy, sustaining work motivation, providing organizational support, and implementing stress-management programs may help nurses manage demanding emergency care environments.

Keywords: Emergency Department Nurses, Self-Efficacy, Work Motivation, Work Stress, Workplace Stress.



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INTRODUCTION

Emergency departments (EDs) constitute critical components of contemporary hospital systems because they provide immediate assessment and intervention for patients whose conditions may deteriorate rapidly and require time-sensitive clinical decisions. Nurses working in EDs are expected to perform triage, stabilize patients, monitor changes in clinical status, coordinate care, and communicate with patients and families within highly compressed time frames, making their work substantially different from many routine nursing settings. The combination of unpredictable patient conditions, high clinical responsibility, rapid decision-making, and continuous interaction with distressed patients and relatives creates an occupational environment characterized by considerable physical and emotional demands (Tohamik, Effendy, & Rahmanti, 2024). Recent literature has increasingly positioned occupational stress in emergency and acute-care nursing as a multidimensional problem involving workload, psychological demands, professional responsibility, team functioning, and individual coping resources rather than merely a consequence of excessive patient numbers. Zhou et al. (2023) demonstrated that occupational stress among clinical ED nurses is closely connected with job involvement and team resilience, indicating that nurses' psychological responses are shaped not only by external demands but also by the resources available within the work environment. The growing complexity of emergency nursing therefore requires attention to both organizational pressures and individual psychological mechanisms that may determine how nurses perceive and respond to demanding clinical situations.

The intensity of ED nursing becomes particularly evident when patient arrivals exceed available treatment capacity, creating overcrowding that can disrupt workflow and increase pressure on healthcare personnel. In the present setting, data obtained from RSUP Dr. Kariadi Semarang indicate

that ED visits reached 4,790 patients in December 2025, equivalent to approximately 155 patients per day, while the number of nurses available in each shift remains limited. Such conditions may require individual nurses to manage multiple patients simultaneously, prioritize competing clinical needs, and maintain service quality despite limited opportunities for rest and recovery. Evidence concerning hospital nursing has consistently linked excessive workload with occupational stress, suggesting that sustained imbalance between work demands and available resources can produce psychological strain and reduce nurses' capacity to recover during working periods (Musdalifah & Dirdjo, 2021). The emergency-care literature also indicates that workload is only one component of a broader set of determinants, as characteristics of the workplace, interpersonal demands, and organizational conditions may interact in shaping nurses' stress experiences (Kusumawati et al., 2024). A review of contemporary emergency and critical nursing challenges similarly emphasizes that the rapidly changing nature of emergency care requires nurses to maintain clinical competence and psychological readiness under conditions of uncertainty and pressure (Judha, 2025). These circumstances make work-related stress an important occupational and healthcare-quality concern rather than an isolated individual difficulty.

Work-related stress can be understood as a psychological response that emerges when perceived occupational demands exceed an individual's available capacity or resources for managing those demands. Among ED nurses, stress may arise from high patient volumes, rapid decision-making, unpredictable clinical deterioration, rotating shifts, role conflict, emotional encounters with patients and families, and the need to perform complex interventions under time constraints. Persistent exposure to such demands can contribute to physical and emotional exhaustion, impaired concentration, reduced psychological well-being, and difficulties in sustaining optimal professional performance. Evidence from hospital nurses indicates that work-related stress is associated with self-efficacy and mental health, suggesting that nurses' perceptions of their own capabilities may influence how occupational demands are experienced psychologically (Azemi et al., 2022). Research among emergency nurses has also shown that occupational stress exists alongside variations in job involvement and resilience, reinforcing the view that stress should be examined through the interaction between environmental demands and individual psychological resources (Zhou et al., 2023). More recent evidence further suggests that psychological well-being among ED nursing staff is influenced by the complex interaction of working conditions, emotional experiences, and adaptive processes within emergency-care environments (Raun, Lassen, & Østervang, 2025). Understanding the determinants of work-related stress therefore requires consideration of internal psychological resources that may strengthen nurses' capacity to interpret, manage, and respond to demanding situations.

One internal factor that may help nurses cope with occupational pressure is self-efficacy, defined as an individual's belief in their capability to organize and execute actions required to manage particular tasks and challenges. Nurses with stronger self-efficacy may be more willing to make clinical decisions, persist when difficulties arise, and employ adaptive strategies when confronted with stressful work situations. Evidence from nursing education has connected self-efficacy with motivation and perceived competency, indicating that confidence in one's capabilities can strengthen engagement with demanding professional tasks (Mohamed, El-Sayed, & Ashour, 2023). Research specifically addressing nurses has provided stronger evidence that self-efficacy functions as a psychological resource in occupational stress processes, although the magnitude and role of this relationship may differ according to clinical context and population. A prospective study among ICU nurses found that self-efficacy served as an important psychological resource in managing stress-related emotional exhaustion, highlighting its potential relevance in high-acuity clinical environments (Gil-Almagro et al., 2025). Recent research involving acute and critical care nurses has also positioned self-efficacy as a mediating mechanism between perceived stress and burnout, suggesting that confidence in personal capability may influence how occupational stress translates into adverse psychological outcomes (Lee et al., 2026). These findings support the conceptual relevance of self-efficacy in emergency nursing while also indicating that its relationship with work-related stress warrants examination within specific clinical settings rather than being assumed to operate uniformly across nursing populations.

Work motivation represents another internal factor that may shape nurses' persistence, engagement, and responses to occupational demands, encompassing intrinsic motives such as professional responsibility and satisfaction from helping patients as well as extrinsic influences including recognition, supervisory support, career opportunities, and working conditions. Motivation theories emphasize that individuals' behavioral persistence is influenced by interacting intrinsic and

extrinsic drivers, meaning that motivation cannot be reduced to financial incentives or formal organizational rewards alone (Bandhu et al., 2024). In nursing practice, stronger work motivation has been associated with professional attitudes and behavioral outcomes, while inadequate motivation may become particularly problematic when nurses face persistent workloads and emotionally demanding clinical environments. Evidence from hospital nursing has identified a relationship between self-efficacy and work motivation, indicating that nurses' confidence in their capabilities may reinforce their willingness to engage with and persist in occupational responsibilities (Saputra et al., 2025). Work motivation has also been examined in relation to job satisfaction and turnover intention, suggesting that motivational conditions may influence nurses' capacity to remain engaged with their professional roles under challenging organizational circumstances (Pradipta et al., 2023). Research examining workload, stress, motivation, and performance further indicates that these constructs are interconnected rather than functioning as independent determinants of nurses' occupational outcomes (Post & Nababan, 2025). The relationship between work motivation, self-efficacy, and work-related stress consequently presents a potentially important psychological pathway for understanding why nurses exposed to comparable ED demands may experience different levels of occupational strain.

Despite the growing evidence concerning occupational stress, self-efficacy, and work motivation in nursing, important empirical and conceptual gaps remain regarding how these factors operate together among nurses working in emergency departments, particularly within the Indonesian hospital context. Existing studies have established associations between self-efficacy and stress, motivation and occupational behavior, and resilience and psychological adaptation, yet these findings have often examined individual relationships or populations outside the specific ED context addressed in the present study. Evidence from Indonesian emergency nursing has identified relationships between self-efficacy, occupational stress, and clinical knowledge, while other studies have emphasized organizational and environmental determinants of stress, leaving the combined contribution of self-efficacy and work motivation insufficiently clarified (Fadli, Daud, & Mira, 2023). Recent studies have also demonstrated that self-efficacy may interact with resilience, coping, leadership, and other psychological resources among emergency nurses, suggesting that individual capability beliefs operate within a broader psychosocial system rather than as an isolated protective factor (Peng et al., 2026). Research on resilience-oriented and psychological interventions has further indicated that self-efficacy and work stress can be modified through targeted approaches, reinforcing the practical importance of identifying their relationships before designing context-specific interventions (Resmiati, Wijayanti, & Arifin, 2026). The present study addresses this gap by examining self-efficacy and work motivation simultaneously in relation to the level of work-related stress among nurses in the ED of RSUP Dr. Kariadi Semarang, thereby connecting individual psychological resources with an objectively demanding emergency-care environment. Specifically, the study aims to determine the relationships between self-efficacy and work motivation and nurses' work-related stress levels, while contributing empirical evidence for a more integrated understanding of psychological factors associated with occupational stress and providing a methodological basis for future nursing-management and psychosocial interventions targeting emergency-care personnel.

RESEARCH METHODS

This study employed an empirical quantitative correlational design with a cross-sectional approach to examine the relationships between self-efficacy, work motivation, and the level of work-related stress among nurses working in the Emergency Department (ED) of RSUP Dr. Kariadi Semarang, Indonesia. The study was conducted from June to July 2026, with a target population consisting of 88 ED nurses, from which 83 respondents were included after the application of predetermined eligibility criteria. Eligible participants were ED nurses who were actively working during the study period, had sufficient experience to understand the occupational conditions being assessed, and were willing to participate by providing informed consent, whereas nurses who were on extended leave, unavailable during the data-collection period, or unable to complete the questionnaire were excluded. The focus on active ED nurses was consistent with evidence that emergency nursing involves distinctive occupational demands and psychological pressures associated with rapidly changing patient conditions and clinical responsibilities (Kusumawati et al., 2024). Data were collected through a structured online questionnaire distributed using Google Forms after eligible nurses had received information regarding the study and voluntarily agreed to participate. The cross-sectional

approach enabled the three principal variables to be assessed during the same study period, providing a basis for examining their statistical relationships within the existing emergency-care work environment (Azemi et al., 2022).

Three standardized instruments were used to measure the principal study variables, namely the 21-item The New Job Stress Scale (NJSS) for work-related stress, the 10-item General Self-Efficacy Scale (GSES) for self-efficacy, and the 12-item Motivation at Work Scale (MAWS) for work motivation. Work-related stress scores were classified into mild, moderate, and severe categories, while self-efficacy and work motivation were each categorized as low, moderate, and high according to the scoring procedures applied in the study. The selection of self-efficacy as a principal variable was supported by evidence indicating that self-efficacy represents an important psychological resource in nurses' responses to occupational stress (Rafiei et al., 2024). Descriptive analysis was performed using univariate statistics to present respondent characteristics and the frequency distribution of each research variable, while bivariate analysis was conducted using the Spearman Rank correlation test because the principal variables were analyzed on an ordinal scale. A relationship was considered statistically significant when the p-value was less than 0.05, allowing the analysis to determine whether variations in self-efficacy and work motivation were significantly associated with differences in work-related stress levels. The inclusion of work motivation alongside self-efficacy was theoretically relevant because motivation represents an important determinant of sustained work engagement and professional behavior among nurses (Wallin et al., 2022). Ethical approval was obtained from the Health Research Ethics Committee of RSUP Dr. Kariadi Semarang under approval number 16799/EC/KEPK-RSDK/2026, and all participants received information concerning the study objectives, confidentiality of their data, their right to refuse participation, and their freedom to withdraw from the study at any time without consequences.

RESULTS AND DISCUSSION

Respondent Characteristics

The study involved 83 nurses working in the Emergency Department (ED) of RSUP Dr. Kariadi Semarang, with the respondent profile indicating a predominantly experienced nursing workforce. Most respondents were aged 30–40 years, female, employed as PPPK personnel, and held a Diploma III in Nursing qualification. In addition, a substantial proportion of respondents had more than 10 years of work experience, indicating that the sample was largely composed of nurses who had been exposed to clinical practice over an extended period. The distribution of these characteristics is presented in Table 1 and provides an important context for interpreting the psychological and occupational variables examined in the study. Emergency nursing requires rapid clinical decision-making, continuous monitoring, and adaptation to unpredictable patient conditions, making the demographic and professional composition of the nursing workforce relevant to occupational stress and psychological functioning (Kusumawati et al., 2024). The predominance of experienced nurses may also indicate that many respondents had developed established patterns of responding to the demands associated with emergency-care practice.

Table 1. Respondent Characteristics

Characteristics	Frequency	Percentage
Age <30 years	6	7.2
Age 30–40 years	57	68.7
Age >40 years	20	24.1
Male	35	42.2
Female	48	57.8
Civil Servant (PNS)	32	38.6
Government Contract Employee (PPPK)	48	57.8
Non-Government Employee (Non-ASN)	3	3.6
Diploma III in Nursing	49	59.0
Professional Nurse	33	39.8
Specialist Nurse	1	1.2

Work experience <5 years	15	18.1
Work experience 5–10 years	20	24.1
Work experience >10 years	48	57.8

As shown in Table 1, respondents aged 30–40 years constituted the largest age group, accounting for 57 nurses (68.7%), followed by those aged >40 years at 24.1% and those aged <30 years at 7.2%. This age distribution suggests that the ED workforce was concentrated within a period of professional life commonly associated with accumulated clinical experience and sustained occupational responsibilities. The predominance of female nurses, comprising 48 respondents (57.8%), was also consistent with the demographic composition frequently observed within the nursing profession, although gender itself should not be interpreted as a direct determinant of occupational stress without considering organizational and individual factors. The concentration of respondents in the 30–40-year age range may reflect a balance between clinical experience and continued capacity to respond to the intensive physical and cognitive demands of emergency nursing. Occupational stress among emergency nurses is shaped by multiple interacting determinants, including workload, work environment, interpersonal conditions, and individual resources rather than demographic characteristics in isolation (Kusumawati et al., 2024). Hence, the demographic profile primarily functions as contextual information for understanding the characteristics of the population in which self-efficacy, work motivation, and work-related stress were assessed.

The employment-status distribution showed that 48 respondents (57.8%) were PPPK personnel, while 32 respondents (38.6%) were civil servants and only 3 respondents (3.6%) were non-government employees. This composition indicates that the ED nursing workforce was predominantly employed within formal public-sector arrangements, although differences in employment status may still be associated with perceptions of career stability, organizational expectations, workload, and professional development opportunities. Work motivation among nurses can be influenced by organizational conditions and professional experiences, including recognition, career opportunities, interpersonal relationships, and perceived support within the workplace (Bandhu et al., 2024). The relatively large proportion of PPPK nurses is also relevant because employment arrangements may interact with perceptions of organizational commitment and future career prospects, although such relationships were not directly tested in the present analysis. The study did not treat employment status as an independent predictor of stress, so interpretations concerning its potential psychological influence should remain contextual rather than causal. This distinction is important because the cross-sectional design permits examination of relationships among the principal variables but does not establish temporal or causal effects between respondent characteristics and work-related stress.

Educational characteristics showed that 49 respondents (59.0%) held a Diploma III in Nursing qualification, 33 respondents (39.8%) were Professional Nurses, and 1 respondent (1.2%) was a Specialist Nurse. The predominance of Diploma III graduates indicates that the ED workforce included a substantial proportion of nurses whose professional preparation was grounded in applied nursing education and clinical practice. At the same time, the presence of Professional Nurses and a Specialist Nurse indicates variation in educational preparation that may contribute to differences in clinical knowledge, decision-making capacity, and perceived competence. Self-efficacy is closely related to an individual's belief in the ability to perform tasks effectively, while professional competence and previous successful experiences can provide important sources for strengthening such beliefs (Mohamed et al., 2023). Differences in educational background may therefore provide different opportunities for developing confidence in handling complex clinical situations, although the present study did not conduct a comparative analysis of self-efficacy according to educational level. The educational distribution should consequently be interpreted as a characteristic of the sample rather than evidence that a particular qualification directly produces higher or lower self-efficacy or stress.

Work experience represented another prominent characteristic, with 48 respondents (57.8%) reporting more than 10 years of employment, compared with 20 respondents (24.1%) with 5–10 years and 15 respondents (18.1%) with less than 5 years of experience. The high proportion of nurses with more than a decade of experience suggests that many respondents had encountered repeated exposure to emergency situations, varying patient acuity, time-sensitive interventions, and interprofessional collaboration. Repeated successful experiences in demanding clinical situations can strengthen perceptions of capability and contribute to professional resilience, although prolonged exposure to

occupational demands may also create cumulative psychological burden when adequate organizational resources are unavailable (Peng et al., 2026). This dual possibility is particularly relevant in emergency nursing because experience can simultaneously function as a resource for coping and as an indicator of prolonged exposure to demanding work conditions. Previous research among emergency nurses has similarly emphasized the importance of self-efficacy, resilience, coping style, and leadership conditions in shaping how nurses respond to occupational demands (Peng et al., 2026). The long work experience observed in this sample therefore provides an important contextual basis for interpreting the subsequent finding that self-efficacy was predominantly moderate while work-related stress remained predominantly moderate.

Taken together, the respondent characteristics describe an ED nursing workforce dominated by nurses aged 30–40 years, female nurses, PPPK personnel, Diploma III graduates, and nurses with more than 10 years of professional experience. This profile suggests that the respondents generally possessed substantial exposure to clinical practice, yet extensive experience should not be equated automatically with complete psychological adaptation to emergency-care demands. Emergency departments remain environments characterized by rapidly changing patient conditions, high clinical responsibility, and potentially unpredictable workloads, which can place sustained demands on nurses regardless of professional tenure (Kusumawati et al., 2024). The coexistence of considerable professional experience with occupational pressures provides a relevant context for examining self-efficacy and work motivation as potential psychological resources associated with work-related stress. Research has indicated that self-efficacy and resilience may support nurses in managing demanding clinical environments, while organizational conditions and leadership can influence the extent to which these resources are maintained (Peng et al., 2026). The respondent profile established in Table 1 therefore supports the need to examine the principal psychological variables rather than assuming that demographic or professional experience alone adequately explains variations in work-related stress.

Distribution of Self-Efficacy, Work Motivation, and Work-Related Stress

The distribution of the principal variables indicates that the participating nurses generally demonstrated moderate self-efficacy, high work motivation, and moderate work-related stress. These three conditions reflect different dimensions of psychological functioning within the emergency-care work environment. Self-efficacy represents nurses' beliefs regarding their capability to manage professional demands, whereas work motivation reflects the willingness and energy directed toward fulfilling occupational responsibilities. Work-related stress, in contrast, represents the psychological burden associated with perceived demands arising from the work environment and professional responsibilities. The contrasting levels observed across these variables are important because strong motivation to perform nursing duties does not necessarily indicate the absence of occupational pressure. Previous research among hospital nurses has similarly emphasized that psychological resources such as self-efficacy may influence responses to occupational stress while remaining distinct from the demands generated by clinical work (Azemi et al., 2022).

Self-efficacy was predominantly classified as moderate, with 46 respondents (55.4%) belonging to this category, while 37 respondents (44.6%) demonstrated high self-efficacy. No respondent was categorized as having low self-efficacy, indicating that the participating ED nurses generally possessed at least an adequate level of confidence in their ability to perform occupational tasks. The distribution of work motivation was more concentrated, with 71 respondents (85.5%) categorized as having high motivation, compared with 11 respondents (13.3%) with moderate motivation and 1 respondent (1.2%) with low motivation. Work-related stress was predominantly moderate, affecting 63 respondents (75.9%), while 18 respondents (21.7%) experienced mild stress and only 2 respondents (2.4%) experienced severe stress. The detailed distribution of the three principal variables is presented in Table 2, which provides the empirical basis for interpreting the psychological resources and occupational pressures experienced by the respondents.

Table 2. Distribution of Self-Efficacy, Work Motivation, and Work-Related Stress

Variable	Category	Frequency	Percentage
Self-Efficacy	Moderate	46	55.4
Self-Efficacy	High	37	44.6

Work Motivation	Low	1	1.2
Work Motivation	Moderate	11	13.3
Work Motivation	High	71	85.5
Work-Related Stress	Mild	18	21.7
Work-Related Stress	Moderate	63	75.9
Work-Related Stress	Severe	2	2.4

The predominance of moderate self-efficacy suggests that more than half of the nurses had sufficient confidence to perform their professional duties but had not reached the highest classification of perceived capability. Self-efficacy is a psychological resource that influences how individuals evaluate challenging situations, regulate effort, and persist when facing obstacles (Rafiei et al., 2024). In an emergency department, such beliefs may be particularly relevant because nurses must respond to changing patient conditions while maintaining accuracy, speed, and clinical judgment. The absence of respondents with low self-efficacy may partly reflect the professional characteristics of the sample, particularly the substantial proportion of nurses with more than 10 years of work experience. Repeated exposure to emergency situations and successful completion of demanding clinical tasks can provide mastery experiences that strengthen confidence in professional capabilities (Peng et al., 2026). Nevertheless, the presence of a moderate rather than uniformly high self-efficacy profile indicates that extensive clinical experience does not automatically produce maximal confidence in handling occupational demands.

The very high proportion of respondents with high work motivation provides a different pattern from the distribution of self-efficacy. Strong work motivation may reflect nurses' professional commitment, responsibility toward patients, intrinsic interest in nursing practice, and organizational factors that reinforce continued engagement with their roles. Motivation theory recognizes that work-related behavior can be sustained through interacting intrinsic and extrinsic drivers, including meaningful work, recognition, achievement, and opportunities for development (Bandhu et al., 2024). The finding is also compatible with evidence that work motivation is associated with important professional outcomes among nurses, including job satisfaction and intentions to remain in the profession (Pradiptha et al., 2023). However, high motivation should not be interpreted as evidence that the occupational environment is psychologically undemanding. The present data instead indicate that nurses can maintain strong motivation while simultaneously experiencing moderate levels of work-related stress, highlighting the distinction between willingness to perform professional duties and the psychological demands imposed by the conditions in which those duties are performed.

The predominance of moderate work-related stress, involving 63 respondents (75.9%), indicates that occupational pressure was a common condition among the ED nurses. Emergency nursing involves rapid changes in patient acuity, time-sensitive interventions, unpredictable workloads, communication with patients and families, and the need to coordinate care under demanding circumstances, all of which can contribute to occupational stress (Judha, 2025). The small proportion of respondents experiencing severe stress may indicate that many nurses had developed adaptive mechanisms through professional experience, teamwork, and repeated exposure to emergency-care situations. Nevertheless, the large proportion experiencing moderate stress remains clinically relevant because persistent occupational stress can contribute to emotional exhaustion and adversely affect professional functioning when adequate coping and organizational resources are unavailable (Kumayas et al., 2023). Workload is also recognized as an important factor associated with nurses' work stress, indicating that individual psychological resources should be considered alongside the structural characteristics of the workplace (Musdalifah & Dirdjo, 2021). The findings therefore suggest that stress management in the ED should not be directed only toward nurses who reach severe stress levels, but should also address moderate stress before it becomes persistent or more debilitating.

The coexistence of high work motivation and predominantly moderate stress provides an important analytical finding because motivation does not necessarily function as a direct substitute for adequate working conditions. Nurses may remain highly committed to patient care while experiencing pressure arising from workload, staffing requirements, clinical uncertainty, and organizational demands. Work motivation can support persistence and engagement, but its capacity to buffer occupational stress may depend on nurses' psychological and work-related resources (Wallin et al., 2022). Similarly, self-efficacy may strengthen nurses' perceived ability to cope with demanding

circumstances, but its protective influence can be constrained when workplace pressures exceed available resources (Rafiei et al., 2024). The present distribution consequently supports an integrated view in which individual psychological characteristics and occupational conditions interact in shaping nurses' experiences of stress. This interpretation is particularly relevant to emergency nursing, where resilience, self-efficacy, coping capacity, and leadership support have been identified as interconnected resources for managing complex professional demands (Peng et al., 2026). The subsequent correlation analysis is therefore necessary to establish whether the observed levels of self-efficacy and work motivation are statistically associated with variations in work-related stress.

Overall, the findings in Table 2 show that the respondents were characterized by moderate self-efficacy, high work motivation, and moderate work-related stress. The distribution indicates that strong professional motivation was present alongside a substantial level of occupational pressure, while confidence in personal capability was less concentrated at the high level. This pattern suggests that maintaining motivation alone may be insufficient to prevent work-related stress among ED nurses. Strengthening self-efficacy through clinical simulation, competency development, constructive feedback, and supportive supervision may provide an additional psychological resource for managing demanding situations (Resmiati et al., 2026). At the organizational level, interventions addressing workload, staffing, leadership, and working conditions remain important because psychological resources operate within a broader occupational context (Lee et al., 2026). The descriptive findings therefore establish an empirical foundation for examining the specific relationships between self-efficacy, work motivation, and work-related stress through the Spearman Rank correlation analysis.

Relationship Between Self-Efficacy and Work-Related Stress

The analysis showed a statistically significant relationship between self-efficacy and work-related stress among nurses in the Emergency Department of RSUP Dr. Kariadi Semarang. Spearman Rank analysis produced a correlation coefficient of -0.369 with a p-value of 0.001, indicating a significant negative relationship between the two variables. The negative coefficient indicates that nurses with higher self-efficacy tended to report lower levels of work-related stress. The magnitude of the coefficient indicates a weak relationship, suggesting that self-efficacy is associated with stress but does not independently explain all variations in nurses' stress levels. This finding is relevant in emergency nursing because occupational demands may involve rapid decision-making, high patient acuity, unpredictable clinical situations, and continuous interpersonal demands. Similar evidence has identified self-efficacy as an important psychological resource that can help nurses manage occupational stress and protect psychological well-being (Azemi et al., 2022).

The distribution of respondents across the cross-tabulation further illustrates the direction of this relationship. Among nurses with moderate self-efficacy, 4 respondents experienced mild stress, 40 experienced moderate stress, and 2 experienced severe stress. In comparison, among nurses with high self-efficacy, 14 experienced mild stress and 23 experienced moderate stress, while none experienced severe stress. The proportion of mild stress was higher among nurses with high self-efficacy, whereas severe stress occurred only among nurses with moderate self-efficacy. This pattern provides a descriptive basis for the negative correlation identified through the Spearman Rank test. The detailed distribution of self-efficacy and work-related stress is presented in Table 3.

Table 3. Relationship Between Self-Efficacy and Work-Related Stress Among Emergency Department Nurses

Self-Efficacy	Mild Stress	Moderate Stress	Severe Stress	Total
Moderate	4	40	2	46
High	14	23	0	37
Total	18	63	2	83
Spearman's rho	-0.369			
p-value	0.001			

Table 3 shows that the distribution of stress differs according to the level of self-efficacy. Nurses with high self-efficacy represented 77.8% of nurses with mild stress (14 of 18), whereas nurses with moderate self-efficacy accounted for 88.9% of nurses with severe stress (2 of 2). Among

respondents with moderate self-efficacy, most nurses were categorized as experiencing moderate stress, comprising 40 of 46 respondents. A similar concentration of moderate stress was observed among nurses with high self-efficacy, although the number of nurses experiencing mild stress was proportionally greater in this group. The absence of severe stress among nurses with high self-efficacy is particularly relevant because it suggests that stronger confidence in managing demands may be associated with a lower likelihood of experiencing the highest stress category. These descriptive patterns are consistent with the statistically significant negative coefficient obtained from the correlation analysis.

The weak strength of the relationship indicates that self-efficacy should be understood as one component within a broader set of occupational and psychological factors affecting nurses' stress. Emergency Department nurses may experience stress from workload, patient overcrowding, critical patient conditions, time pressure, interpersonal interactions, and the need to respond to rapidly changing clinical circumstances. Previous research among Emergency Department nurses has identified occupational stress as a multifactorial condition influenced by characteristics of the work environment and professional demands (Kusumawati et al., 2024). Evidence from Indonesian nursing settings also indicates that workload contributes to nurses' work stress (Musdalifah & Dirdjo, 2021). Self-efficacy may reduce the psychological impact of these demands by strengthening nurses' confidence in their ability to perform tasks and manage challenging situations. The present correlation should therefore be interpreted as evidence of an important association rather than as proof that self-efficacy alone determines work-related stress.

The significant negative relationship is also supported by previous studies examining self-efficacy among nurses working in demanding clinical environments. Azemi et al. (2022) reported that work-related stress, self-efficacy, and mental health are interconnected among hospital nurses, highlighting the relevance of psychological resources in occupational well-being. Rafiei et al. (2024) found that self-efficacy plays a moderating role in the relationship between occupational stress and mental health problems among nurses, indicating that stronger self-efficacy may help reduce the psychological consequences of occupational stress. More recent evidence among critical care nurses has likewise positioned self-efficacy as a psychological resource in the management of stress and emotional exhaustion (Gil-Almagro et al., 2025). Research involving emergency nurses has further associated self-efficacy with professional resilience and coping-related capacities in challenging clinical environments (Peng et al., 2026). The consistency between these findings and the present result strengthens the interpretation that self-efficacy is relevant to nurses' ability to manage occupational pressures.

From a nursing practice perspective, the findings indicate that strengthening self-efficacy may be considered as one component of strategies for managing work-related stress among Emergency Department nurses. Interventions can include structured training, simulation-based clinical preparation, supportive supervision, reflective practice, and opportunities to develop confidence in managing complex emergency situations. Such approaches may be particularly useful when integrated with organizational strategies addressing workload, staffing, communication, and the broader working environment. Evidence concerning resilience and self-efficacy among nurses suggests that psychological resources can be strengthened through structured professional and organizational support (Resmiati et al., 2026). The present finding also supports the importance of considering individual psychological resources alongside workplace conditions when addressing occupational stress in emergency nursing. Further research using longitudinal or intervention-based designs would be valuable for determining whether improvements in self-efficacy are followed by measurable reductions in work-related stress.

Relationship Between Work Motivation and Work-Related Stress

The analysis identified a statistically significant relationship between work motivation and work-related stress among nurses in the Emergency Department of RSUP Dr. Kariadi Semarang. Spearman Rank analysis produced a correlation coefficient of -0.231 with a p-value of 0.036 , indicating a significant negative relationship between work motivation and work-related stress. The negative direction indicates that higher work motivation tended to be associated with lower levels of work-related stress. The correlation magnitude was weak, indicating that work motivation was related to stress but represented only one of several factors that may influence nurses' occupational stress. Motivation can

influence persistence, engagement, and willingness to sustain performance when nurses encounter demanding clinical conditions. The relationship is particularly relevant in emergency nursing because sustained motivation may support nurses in maintaining work engagement while responding to high-acuity and rapidly changing patient needs (Wallin et al., 2022).

The cross-tabulation provides a descriptive representation of the association between work motivation and work-related stress. Among nurses with high work motivation, 17 respondents experienced mild stress and 54 experienced moderate stress, while none experienced severe stress. The single nurse categorized as having low work motivation experienced moderate stress. The 11 nurses with moderate work motivation were distributed across the stress categories, although the available cross-tabulation data do not provide the individual cell frequencies for this group. The concentration of high-motivation nurses in the mild and moderate stress categories, together with the absence of severe stress among them, corresponds with the negative direction of the Spearman correlation. The detailed relationship between work motivation and work-related stress is presented in Table 4.

Table 4. Relationship Between Work Motivation and Work-Related Stress Among Emergency Department Nurses

Work Motivation	Mild Stress	Moderate Stress	Severe Stress	Total
Low	0	1	0	1
Moderate	—	—	—	11
High	17	54	0	71
Total	18	63	2	83
Spearman's rho	-0.231			
p-value	0.036			

Table 4 indicates that nurses with high work motivation were predominantly categorized as experiencing moderate stress, with 54 of 71 respondents in this group. Nevertheless, 17 nurses with high motivation experienced mild stress, while none experienced severe stress. The only respondent with low work motivation was categorized as experiencing moderate stress, although this single observation does not permit a meaningful interpretation of the low-motivation category independently. The distribution supports the statistically significant negative correlation, particularly through the absence of severe stress among nurses with high work motivation. At the same time, the predominance of moderate stress among highly motivated nurses indicates that strong motivation does not necessarily eliminate occupational stress. This pattern suggests that nurses can remain highly motivated to perform their professional responsibilities while still experiencing considerable pressure from the emergency work environment.

The weak correlation coefficient also indicates that work motivation should not be viewed as the sole determinant of work-related stress among Emergency Department nurses. Stress in emergency nursing can arise from workload, patient acuity, time pressure, overcrowding, interpersonal demands, and exposure to unpredictable clinical situations. Research involving Emergency Department nurses has identified occupational stress as a multidimensional condition associated with demanding work environments and professional responsibilities (Kusumawati et al., 2024). Workload has also been associated with nurses' occupational stress, indicating that organizational conditions may remain influential even when individual motivation is relatively high (Musdalifah & Dirdjo, 2021). In this context, motivation may help nurses sustain effort and engagement without necessarily removing the external sources of occupational pressure. The present finding is consistent with an interpretation in which motivation represents a psychological resource that operates alongside, rather than independently of, workplace conditions.

The significant relationship is supported by previous research linking work motivation with important occupational outcomes among nurses. Kusumaningrum et al. (2023) identified work motivation as an important factor associated with nurses' work-related characteristics, while Pradiptha et al. (2023) demonstrated the relevance of motivation to job satisfaction and turnover intention among nurses. Wallin et al. (2022) further showed that work motivation and occupational self-efficacy are relevant to nurses' capacity to continue working under demanding conditions. Motivation may contribute to persistence because nurses who perceive greater value and purpose in their work may be

more willing to maintain effort when facing occupational challenges. However, the relatively weak correlation observed in the present study suggests that motivational resources may have limited capacity when stressors originate from structural or environmental conditions. The finding reinforces the importance of considering both individual motivation and the characteristics of the emergency work environment when addressing occupational stress.

The practical implication is that efforts to reduce work-related stress should not focus solely on increasing nurses' motivation but should also strengthen the conditions that allow motivation to be sustained. Supportive leadership, recognition of professional contributions, opportunities for development, clear communication, and appropriate workload management may help maintain motivation while reducing avoidable occupational pressure. Research on nurses' psychological well-being in Emergency Departments emphasizes the importance of both individual and workplace factors in supporting staff well-being (Raun et al., 2025). Organizational initiatives may also be particularly relevant in Emergency Departments experiencing high patient flow and operational pressure, where system-level conditions can intensify nurses' occupational demands (Risdianto et al., 2025). The significant negative relationship found in this study provides empirical support for incorporating work motivation into broader stress-management strategies. Further research using longitudinal or intervention-based designs could examine whether strengthening work motivation produces sustained reductions in occupational stress when combined with improvements in working conditions.

CONCLUSION

The findings indicate that the majority of nurses in the Emergency Department of RSUP Dr. Kariadi Semarang were aged 30–40 years, female, employed as PPPK nurses, held a Diploma III in Nursing, and had more than 10 years of work experience. Most respondents demonstrated a moderate level of self-efficacy, while work motivation was predominantly high and work-related stress was predominantly moderate. The analysis identified a significant negative relationship between self-efficacy and work-related stress, indicating that nurses with higher self-efficacy tended to experience lower levels of occupational stress. A significant negative relationship was also identified between work motivation and work-related stress, although the strength of this relationship was weak. These findings suggest that self-efficacy and work motivation represent relevant psychological resources in understanding variations in work-related stress among Emergency Department nurses. However, the relatively weak correlations indicate that occupational stress is not determined solely by individual psychological factors and may also be influenced by workload, working conditions, organizational support, and other characteristics of the emergency care environment. The findings highlight the importance of strengthening nurses' psychological resources while simultaneously addressing workplace factors that may contribute to occupational stress.

The hospital is encouraged to develop sustainable strategies that support nurses' psychological and professional capacity through continuing training, structured mentoring, work recognition, and stress-management programs that are responsive to the demands of Emergency Department practice. Such programs can be designed to strengthen nurses' confidence in managing complex clinical situations while providing adequate support when occupational demands become challenging. Future research should examine additional factors that may contribute to nurses' work-related stress, including social support, peer support, and the leadership style of nurse managers or head nurses. These factors may provide a broader understanding of how individual, interpersonal, and organizational resources interact in shaping occupational stress among Emergency Department nurses. Further studies are also recommended to adopt intervention-based designs, including stress-management programs and self-efficacy enhancement through training, mentoring, simulation, or other activities adapted to nurses' specific needs. Evaluating these interventions prospectively may provide stronger evidence regarding their effectiveness in improving nurses' confidence and reducing work-related stress. Such efforts are expected to support healthier work environments and help Emergency Department nurses manage occupational demands more effectively while maintaining the quality and continuity of patient care.

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