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Association Between Psychological Empowerment and Intent to Stay Among Military Hospital Nurses: The Mediating Effects of the Practice Environment and Burnout

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ABSTRACT

Aims: To explore the impact of psychological empowerment on nurses' intent to stay in military hospitals as well as the mediating effects of the practice environment and burnout in this context.

Design: This study employed a cross-sectional survey approach and followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines for reporting.

Methods: A total of 1225 nurses from nine military hospitals were recruited via convenience sampling. Questionnaires were distributed and collected via the Questionnaire Star platform. The study variables, including psychological empowerment, the practice environment, burnout and intent to stay, were assessed via self-report questionnaires. SPSS 23.0 software was used to conduct descriptive and correlation analyses. Additionally, PROCESS Model 6 was employed to examine the mediating effects.

Results: Psychological empowerment is positively associated with nurses' intent to stay. Mediation analysis revealed that the practice environment, burnout and the chain mediating effect of the practice environment and burnout accounted for 54.5%, 2.8% and 1.5% of the total effect respectively.

Conclusion: Psychological empowerment affects nurses' intent to stay not only directly but also indirectly via the practice environment and burnout.

Implications for the Profession: Nursing managers may consider utilising psychological empowerment as a management strategy to enhance nurses' perceived practice environment, reduce burnout and ultimately increase nurses' intent to stay. This approach has the potential to lower turnover rates among nurses.

Patient or Public Contribution: Questionnaires completed by nurses were used to explore the relationships among psychological empowerment, the practice environment, burnout and intent to stay in this context.

1 | Introduction

Given the acceleration of the ageing process and increasing demand for the prevention and management of chronic ailments, many countries are currently experiencing a shortage of nurses, which represents a significant challenge for health systems (Gan 2020; Woodward and Willgerodt 2022). Nurses' intent to stay is a reliable indicator that can be used to

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Summary

- Our study revealed that clinical nurses working in military hospitals exhibit lower levels of intent to stay, which could result in higher healthcare costs and decreased quality of patient care. Factors such as psychological empowerment, the practice environment and burnout play significant roles in influencing nurses' intent to stay.
- Psychological empowerment plays a crucial role in the process of establishing a positive clinical practice environment, reducing burnout and enhancing nurses' intent to stay. Therefore, hospital managers should prioritise efforts to promote psychological empowerment in clinical settings.

predict their likelihood of staying in their profession (Pressley and Garside 2023). A previous study revealed that approximately 35.9% of experienced nurses in China exhibit low levels of intent to stay (Wan et al. 2018). This trend is concerning because it may lead to adverse consequences such as increased hospital costs, decreased quality of care and reduced efficiency among nurses (Wan et al. 2018). Military hospitals are viewed as crucial components of a nation's healthcare infrastructure (Patrician et al. 2022). In light of the low rates of intent to stay observed in this context, it is crucial for military hospitals to focus on recruiting and retaining the most skilled military and civilian nurses (Breckenridge-Sproat et al. 2017). Furthermore, the Chinese government has made significant investments in military hospitals, the cost of which can potentially be reduced by identifying ways of improving nurses' intent to stay (Theucksuban et al. 2022). Therefore, specific research on nurses' intent to stay in military hospitals is crucial. Psychological empowerment, the practice environment and burnout are crucial factors that impact nurses' intent to stay. By considering the interactions among these factors, managers can develop effective policies that can help increase nurses' intent to stay. Nevertheless, few studies have explored the complex relationships among these variables. The aim of our study was to bridge this gap by investigating the mechanisms that may explain the links among these variables.

2 | Background

Cowden and Cummings (2012) introduced a theoretical model for clinical nurses' intent to stay. According to this model, psychological empowerment, as a cognitive reaction to work, can impact nurses' intent to stay either directly or indirectly. Burnout, which represents an emotional response to one's job, may serve as a mediator in the relationship between psychological empowerment and intent to stay. However, this model did not demonstrate a direct link between the practice environment and intent to stay but rather treated psychological empowerment as a predictor of the practice environment. Building on this foundation, Kim and Lee (2023) reported that various aspects of the practice environment can influence intent to stay either directly or indirectly via burnout. We drew from these theoretical perspectives to refine the theory that psychological empowerment influences intent to stay and examined the relationships among psychological empowerment, the practice environment, burnout and intent to stay in the context of nurses working in Chinese military hospitals. The subsequent sections discuss the definitions of these variables and the interconnections among them in further detail.

2.1 | Psychological Empowerment and Intent to Stay

Psychological empowerment has frequently been characterised as an intrinsic motivational mechanism that influences employees' behaviour and performance (Jácome and Chión 2022). This notion encompasses four dimensions: meaning, competence, self-determination and impact. 'Meaning' refers to employees' subjective evaluation of their current tasks and goals on the basis of their values; 'competence' indicates employees' belief in their ability to accomplish a task; 'self-determination' focuses on employees' recognition of autonomy in terms of their approach to their work; and 'impact' reflects employees' perceptions of the outcomes of their performance (Sobrino-De Toro, Labrador-Fernández, and de Nicolás 2019). Previous studies have indicated that enhanced psychological empowerment can contribute to greater organisational commitment and job satisfaction among employees (Li et al. 2018); it can also enhance employees' self-efficacy, thus leading to improved work efficiency (Gu, Wang, and Pan 2022). When employees feel empowered, they experience a sense of purpose and capability with regard to their work, which results in increased activity and energy and ultimately leads to greater job satisfaction and organisational commitment. Consequently, such employees are more likely to remain in the organisation. When individuals experience higher levels of psychological empowerment, their intent to stay tends to be stronger (Sandhya and Sulphey 2021). Therefore, it is reasonable to hypothesise that psychological empowerment is closely related to nurses' intent to stay.

2.2 | Psychological Empowerment, the Practice Environment and Intent to Stay

In the context of nursing, the practice environment pertains to the organisational attributes of the work setting that can either promote or impede professional nursing practice (Lake 2002). This concept is based on the sociology of organisations, occupations and work and emerged from research on magnet hospitals. Psychological empowerment, the practice environment and intent to stay are closely intertwined. First, psychological empowerment is notably correlated with the practice environment. According to Kanter's and Spreitzer's theory of empowerment, psychological empowerment fosters an effective practice environment by providing employees with the opportunities, support, resources and information they need to perform their work (Kennedy, Hardiker, and Staniland 2015). Psychological empowerment enables nurses to perceive themselves as essential members of the hospital and to obtain value and recognition through their work (Wei

et al. 2018); it also plays a crucial role in enhancing nurses' capabilities to serve as clinical leaders, thus enabling them to make positive contributions to the practice environment (Connolly, Jacobs, and Scott 2018). As a result, psychological empowerment is essential with regard to the task of establishing a healthy practice environment for nurses. Second, the practice environment has a significant effect on nurses' intent to stay, a finding that has been confirmed in many previous studies (Breckenridge-Sproat et al. 2017; Al-Hamdan, Manojlovich, and Tanima 2017). A favourable practice environment helps alleviate nurses' job stressors, thereby improving their intent to stay (Breckenridge-Sproat et al. 2017). On the basis of these findings, we proposed that psychological empowerment may influence intent to stay via the mediating effect of the practice environment.

2.3 | Psychological Empowerment, Burnout and Intent to Stay

Burnout, which is a syndrome resulting from prolonged workplace stress, is characterised by negative attitudes and emotions towards co-workers (Şenol Çelik, Sariköse, and Çelik 2024). Research has consistently reported strong correlations among burnout, psychological empowerment and intent to stay in the nursing profession. On the one hand, psychological empowerment enables nurses to acknowledge the significance of their work and find meaning in their professional roles, which can help mitigate burnout among nurses by counteracting the monotony of their tasks. Increasing nurses' psychological empowerment promotes positive work attitudes, reduces burnout and leads to desirable outcomes (Şenol Çelik, Sariköse, and Çelik 2024). Consequently, psychological empowerment has often been recommended as a strategy that can be used to mitigate nurse burnout and enhance the quality of patient care (Yeh et al. 2021). On the other hand, burnout decreases nurses' satisfaction with their jobs and reduces their intent to stay (Poku, Donkor, and Naab 2022). Hence, we proposed the following hypothesis: burnout acts as a mediator in the relationship between psychological empowerment and intent to stay.

2.4 | The Practice Environment and Burnout

As hypothesised above, the practice environment and burnout may play mediating roles in the relationship between psychological empowerment and intent to stay among nurses. In addition, the practice environment and burnout are correlated with one another. Previous research has indicated that an unfavourable practice environment is linked to dissatisfaction with one's job and the experience of burnout (Kelly, McHugh, and Aiken 2019). Nurses who exhibit negative perceptions of the practice environment are more susceptible to burnout than are nurses who do not exhibit such perceptions. This burnout, which results from an unfavourable practice environment, ultimately leads to increased turnover intentions among nurses (Ambani, Kutney-Lee, and Lake 2020). Therefore, we sought to identify the mechanisms that mediate the relationship between psychological empowerment and intent to stay among nurses; that is, we proposed that psychological empowerment can reduce the occurrence of burnout by improving the practice environment, ultimately enhancing nurses' intent to stay.

3 | The Study

The objective of this study was to investigate the mechanism underlying the associations among psychological empowerment, the practice environment, burnout and intent to stay in the context of military nurses. In light of the extant literature on this topic, we proposed four research hypotheses, as illustrated in Figure 1:

Hypothesis 1. *Nurses' psychological empowerment positively influences their intent to stay in military hospitals.*

Hypothesis 2. *Nurses' psychological empowerment indirectly influences their intent to stay in military hospitals via the mediating effect of the practice environment.*

Hypothesis 3. *Nurses' psychological empowerment indirectly influences their intent to stay in military hospitals via the mediating effect of burnout.*

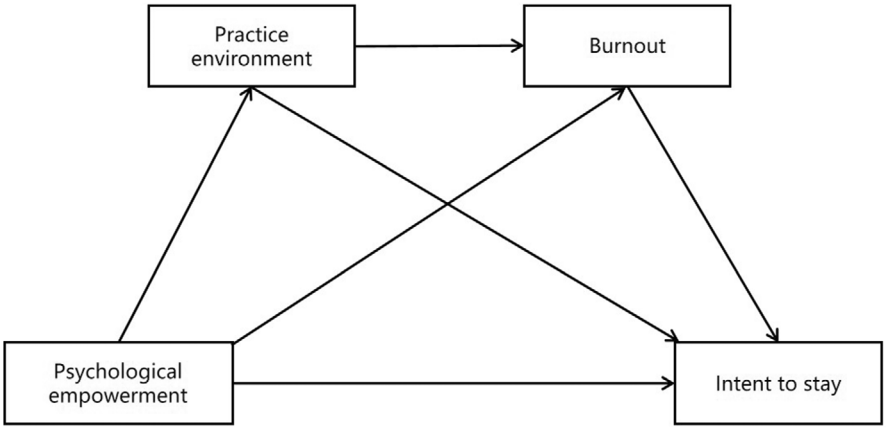

FIGURE 1 | Hypothesised relationships among psychological empowerment, practice environment, burnout and intent to stay. H1: Psychological empowerment → Intent to stay. H2: Psychological empowerment → Practice environment → Intent to stay. H3: Psychological empowerment → Burnout → Intent to stay. H4: Psychological empowerment → Practice environment → Burnout → Intent to stay.

Hypothesis 4. *Nurses' psychological empowerment indirectly influences their intent to stay in military hospitals via the chain mediating effect of the practice environment and burnout.*

4 | Methods

4.1 | Study Design

This study employed a cross-sectional survey approach and followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines for reporting (Table S1).

4.2 | Study Setting and Sampling

Participants were recruited from nine military hospitals in Shaanxi Province via convenience sampling. The required sample size for regression analysis was determined with the assistance of G*Power software version 3.1.9.7 (Hu and Xu 2024). Since this research featured an effect size of 0.15, a power $(1-\beta)$ of 0.80, a significance level (α) of 0.05 and six predictive variables, a minimum sample size of 98 was calculated to be necessary. On the basis of a potential dropout rate of 20%, the recommended sample size was at least 118 nurses. Ultimately, 1225 questionnaires were included in the study to ensure a sufficient sample size.

4.3 | Inclusion and Exclusion Criteria

The inclusion criteria for survey subjects were as follows: (1) held a nurse practitioner qualification certificate, (2) had been employed for ≥1 year and (3) had a clear consciousness and no history of mental disorders. The exclusion criteria for participants were as follows: (1) had travelled abroad for further study, (2) served as internship nurses and (3) had recently experienced major changes or trauma.

4.4 | Data Collection

Before data collection began, 40 nurses from a hospital were recruited to complete questionnaires. The comprehensibility and accuracy of the questionnaire were initially validated with these nurses face-to-face. All the data were collected via an electronic survey platform (i.e., the Questionnaire Star platform). After the nursing department provided consent, an e-poster that contained a link to the online survey was created and distributed to nurses via WeChat (a social networking platform). The questionnaires were all accompanied by instructions that explained relevant concepts, the purpose of the survey, its significance, etc.; furthermore, participants were promised that the survey results would remain confidential and asked to provide informed consent. The questionnaire was completed by the nurses anonymously and independently. Participants received a small gift upon completion of the questionnaire. Two researchers verified the IDs and related information in the electronic questionnaire system to guarantee the accuracy of the exported data. The relevant data were collected from November 2022 to December 2023, and questionnaires containing incomplete information or invalid answers were omitted.

4.5 | Instruments

4.5.1 | Nurse Characteristics

This study was designed autonomously in light of the objectives of this research and the unique circumstances that characterise military hospitals in China. Factors such as participants' gender, highest level of education, job position, ethnicity and professional experience were carefully considered during the planning phase.

4.5.2 | Intent to Stay Scale

The nurse intent to stay questionnaire developed by Turnley et al. was used; this questionnaire included six single-dimensional items, of which items 2, 3 and 6 were reverse scored during the statistical analysis (Turnley and Feldman 1998). The questionnaire was scored on a 5-point Likert scale ranging from 1 ('absolutely impossible') to 5 ('very likely'), for a total of 30 points; the higher this score was, the stronger the respondent's intent to stay (Turnley and Feldman 1998). The Chinese version of the intent to stay scale was used in this study, and the Cronbach's α coefficient was 0.778 (Kong et al. 2022).

4.5.3 | Psychological Empowerment Scale

Psychological empowerment was measured via the psychological empowerment scale developed by Spreitzer (1995). This scale included four dimensions, each of which contained three items, for a total of 12 items. Each item was scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), for a total of 60 points; higher scores indicated higher levels of psychological empowerment (Liu, Zhang, and Jin 2022). The Cronbach's α coefficient for the Chinese version of the psychological empowerment scale in this study was 0.930 (Liu, Zhang, and Jin 2022).

4.5.4 | The Nursing Practice Environment Assessment Scale

The nursing practice environment was evaluated via the revised Chinese version of the Nursing Practice Environment Assessment Scale (C-PES) (Zhao, Zhang, and Shi 2024). This scale has been shown to exhibit a high degree of universality with respect to the Chinese population and has been widely used to evaluate the practice environment of Chinese nurses. This scale was developed as a self-evaluation tool featuring 36 items across 10 dimensions as well as 1 item used to provide an overall evaluation of the practice environment. The dimensions contained in this scale included hospital management participation, clinical nursing professionalism, leadership and communication, quality management, internal support, medical and nursing cooperation,

professional improvement, manpower allocation, social status and salary and benefits (Zhao, Zhang, and Shi 2024). Each item included in this measure was scored on a scale ranging from 0 to 100, in which context a score of 0 indicated strong agreement and a score of 100 indicated strong disagreement. The average score of all the items was calculated based on a total possible score of 100; higher scores indicated a better practice environment. The overall Cronbach's α coefficient for the C-PES in this study was 0.983 (Zhao, Zhang, and Shi 2024).

4.5.5 | Burnout Scale

Burnout was assessed via the Chinese revised version of the Burnout Inventory, which was revised by Li et al. and is currently the most commonly used tool for assessing burnout among nurses in China (Liu et al. 2024). This scale featured 22 items across three dimensions: personal accomplishment, depersonalisation and emotional exhaustion. This measure was scored on a 7-point scale ranging from 0 to 6, for a total of 132 points; higher scores indicated higher levels of burnout (Liu et al. 2024). In this study, the Burnout Inventory exhibited good validity and reliability; namely, its Cronbach's α coefficient was 0.93.

4.6 | Statistical Analysis

The data collected for this research were analysed via SPSS (version 23.0) software, and a significance level of 0.05 was used for the research variables. Descriptive statistics were used to describe the characteristics and instrument scores. The correlations among the study variables were analysed via Pearson correlation analysis. After a preliminary analysis was conducted, PROCESS Model 6 (version 3.5) was used to examine the mediating effects (bootstrap resamples = 5000). In brief, the independent and mediating variables were entered into the regression equation sequentially. A bias-corrected bootstrapping procedure was employed to calculate the indirect effects. When the 95% bootstrap confidence interval did not include zero, the indirect effects were found to be statistically significant.

4.7 | Ethical Approval and Consent to Participate

This study was approved by the Medical Ethics Committee of the First Affiliated Hospital, Air Force Medical University (Approval No. KY20222252-C-1). All methods used in this research were implemented in accordance with the relevant guidelines and regulations. All participants provided informed consent prior to their participation in the study.

5 | Results

5.1 | Assessment of Common Method Bias

To investigate the common source biases and systematic errors resulting from the use of self-rated questionnaires in this research, Harman's single-factor analysis (Gao et al. 2022) was employed in this study. The findings of this analysis revealed 15 factors that exhibited eigenvalues greater than 1, and the initial factor explained 38.1% of the total variation. According to the relevant criteria (Gao et al. 2022), this study was not affected by any significant degree of common method bias.

5.2 | Participant Characteristics

The survey included nine hospitals featuring military medical institutions, and 1280 nurses participated in this research. A total of 1225 questionnaires were collected, resulting in an impressive recovery rate of 95.7% with regard to valid surveys.

TABLE 1 | Demographic characteristics of the participants ($n = 1225$).

Variable	*N*	%
Age (years)		
18–25	285	23
26–30	598	49
31–35	261	21
36–40	68	6
41–45	13	1
Sex		
Female	1155	94
Marital status		
Single	565	46
Married	636	52
Divorced and widowed	24	2
Education level		
College diploma	303	25
Bachelor degree	798	65
Master's degree	124	10
Position		
Staff nurse	1027	84
Head nurse	83	7
Nurse specialist	115	9
Ethnicity		
Han	1123	92
Working experience (years)		
1–3	432	35
4–6	307	25
7–10	323	26
11–15	82	7
16–20	68	6
21–30	13	1

Table 1 presents the demographic information concerning these participants. The majority of participants were women (94%); furthermore, approximately 46% of participants were unmarried, while 52% were married. Among all participants, staff nurses accounted for 84%, and head nurses accounted for 7%. With respect to educational attainment, 25% of participants had obtained a college diploma, 65% had obtained a bachelor's degree and 10% had obtained a master's degree.

5.3 | Descriptive Statistics and Correlations Among the Main Variables

As presented in Table 2, the mean scores for psychological empowerment, practice environment, burnout and intent to stay were 42.622 ± 9.000, 74.944 ± 19.456, 61.326 ± 12.819 and 18.821 ± 3.674 respectively. The findings of the Pearson correlation analysis presented in Table 2 revealed significant associations among psychological empowerment, the practice environment, burnout and intent to stay (each $p < 0.01$). Specifically, psychological empowerment was positively correlated with the practice environment ($r = 0.535$, $p < 0.01$) and negatively correlated with burnout ($r = -0.253$, $p < 0.01$). Moreover, the practice environment was negatively correlated with burnout ($r = -0.241$, $p < 0.01$). Furthermore, psychological empowerment and the practice environment were significantly and positively correlated with intent to stay ($r = 0.381$, $p < 0.01$ and $r = 0.491$, $p < 0.01$ respectively), while burnout was negatively correlated with intent to stay ($r = -0.191$, $p < 0.01$). The descriptive statistics and related analysis results offered us an initial understanding of the relationships among these variables and served as a foundation for further data analysis.

TABLE 2 | Means, standard deviations and correlations for the major variables.

Variable	Mean	SD	1	2	3	4
1. Psychological empowerment	42.622	9.000	1.00			
2. Practice environment	74.944	19.456	0.535**	1.00		
3. Burnout	61.326	12.819	−0.253**	−0.241**	1.00	
4. Intent to stay	18.821	3.674	0.381**	0.491**	−0.191**	1.00

Note: $N = 1225$.
**$p < 0.01$; all tests were two-tailed.

TABLE 3 | Regression analysis of the relationship between psychological empowerment and intent to stay.

Regression equation		Fitting index		Significance	
Outcomes	**Predictors**	R^2	F	β	t
ITS		0.154	55.487***		
	PE			0.396	14.845***
	Covariates[a]				
Practice environment		0.306	134.834***		
	PE			0.515	21.300***
	Covariates[a]				
Burnout		0.185	55.454***		
	PE			−0.147	−4.796***
	Practice environment			−0.156	−5.040***
	Covariates[a]				
ITS		0.288	81.979***		
	PE			0.163	5.625***
	Practice environment			0.420	14.298***
	Burnout			−0.076	−2.831**
	Covariates[a]				

Note: $N = 1225$.
Abbreviations: ITS, intent to stay; PE, psychological empowerment.
[a]Education level, marital status and position are included as control variables.
**$p < 0.01$.
***$p < 0.001$.

5.4 | Chain Mediation Analysis

The regression analysis results are presented in Table 3. The findings indicated that intent to stay was significantly and positively influenced by psychological empowerment ($\beta = 0.396$, $p < 0.001$), thus supporting Hypothesis 1. After the practice environment and burnout were incorporated into the regression equation, psychological empowerment positively predicted the practice environment ($\beta = 0.515$, $p < 0.001$) but had a negative predictive effect on burnout ($\beta = -0.147$, $p < 0.001$). Moreover, the practice environment negatively predicted burnout ($\beta = -0.156$, $p < 0.001$) and positively predicted intent to stay ($\beta = 0.420$, $p < 0.001$). Furthermore, burnout exhibited a substantial negative association with intent to stay ($\beta = -0.076$, $p < 0.01$). Moreover, the direct impact of psychological empowerment on intent to stay was notably reduced ($\beta = 0.163$, $p < 0.001$). These findings highlight the significance of the practice environment, burnout and the chain mediating effect of the practice environment and burnout regarding the influence of psychological empowerment on intent to stay. Thus, these findings confirm Hypotheses 2, 3 and 4.

Table 4 and Figure 2 present the mediating effects of the practice environment and burnout on the relationship between psychological empowerment and intent to stay. The total effect of psychological empowerment on intent to stay was 0.396, including a direct effect value of 0.163. When the standardised mediating effect was assessed, the total value was calculated as 0.233. The mediating effect consisted of three indirect effects: path 1 (psychological empowerment → practice environment → intent

TABLE 4 | Practice environment and burnout in the mediation effect by bootstrapping analysis.

Effect	Pathway	β	SE	t	p	95% CI		Effect ratio (%)
						LLCI	ULCI	
Total effect	PE → ITS	0.396	0.011	14.84	0.000	0.140	0.183	
Direct effect	PE → ITS	0.163	0.012	5.62	0.000	0.043	0.089	41.2
Indirect effect 1	PE → Practice environment → ITS	0.216	0.017			0.184	0.254	54.5
Indirect effect 2	PE → burnout → ITS	0.011	0.005			0.002	0.023	2.8
Indirect effect 3	PE → practice environment → burnout → ITS	0.006	0.003			0.001	0.012	1.5
Compare 1	Indirect effect 1 Minus Indirect effect 2	0.205	0.020			0.168	0.245	
Compare 2	Indirect effect 1 Minus Indirect effect 3	0.210	0.019			0.175	0.249	
Compare 3	Indirect effect 2 Minus Indirect effect 3	0.005	0.003			−0.001	0.013	

Note: LLCI and ULCI refer to the lower and upper limits of the 95% confidence interval of the effects estimated by the percentile bootstrap method respectively. Effect ratio refers to the ratio of the indirect or direct effect to the total effect.
Abbreviations: ITS, intent to stay; PE, psychological empowerment; SE, standard error; β, Standardised coefficient.

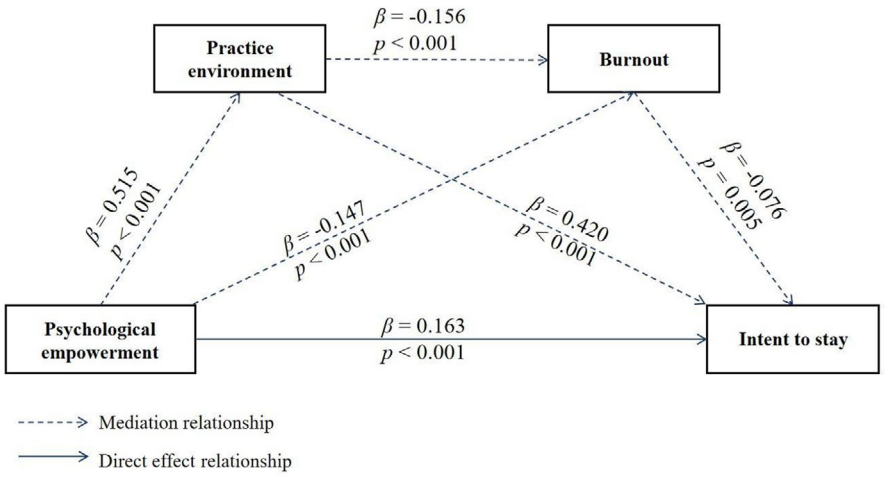

FIGURE 2 | The chain mediation model. $N = 1225$.

to stay), which exhibited a value of 0.216; path 2 (psychological empowerment → burnout → intent to stay), which exhibited a value of 0.011 and path 3 (psychological empowerment → practice environment → burnout → intent to stay), which exhibited a value of 0.006. With regard to paths 1, 2 and 3, the proportions of these three indirect impacts on the overall impact were 54.5%, 2.8% and 1.5% respectively. All three indirect impacts exhibited statistical significance, as the bootstrap confidence interval of 95% excluded zero. As a result, Hypotheses 2, 3 and 4 were once again verified. Comparison 1 revealed that the bootstrap 95% confidence interval pertaining to the variance between indirect impacts 1 and 2 did not contain 0, thus indicating the presence of a significant distinction. We employed the same method for comparison and identified notable disparities between indirect effects 1 and 3; however, we did not identify any significant differences between indirect effects 2 and 3.

6 | Discussion

As a subjective intention, intent to stay is inevitably influenced by psychological factors. However, only limited attention has been given to the connection between nurses' intent to stay and psychological empowerment. This study is the first to examine the impact of psychological empowerment on intent to stay among nurses working in military hospitals as well as the underlying mechanisms. Given the unique status and mission of military hospital nurses, their intent to stay deserves particular attention and discussion (Breckenridge-Sproat et al. 2017).

A recent study revealed that military hospitals in the United States that obtained higher practice environment score a higher level of intent to leave than civilian hospitals (Patrician et al. 2022). The findings of our research corroborated this trend, as the mean intent to stay score observed among military hospital nurses was 18.821 ± 3.674, which was lower than the average level observed in civilian hospitals (Wang et al. 2012). The combination of nursing and working in the military intensifies the work stress and workloads experienced by these nurses, which may contribute to their lower levels of intent to stay. This situation could impact the quality of patient care and increase healthcare costs. Our findings suggest that psychological empowerment can enhance nurses' intent to stay by influencing the practice environment, reducing burnout and addressing the interactions between these factors. These insights can provide guidance to military hospital departments regarding the development of strategies to retain nurses effectively.

Psychological empowerment can positively affect employees' intent to stay, as has been confirmed by previous research (Meng et al. 2015). Our study further highlights the importance of psychological empowerment as a motivating factor that encourages military nurses to remain in their positions. In other words, as the level of psychological empowerment increases, so does the strength of nurses' intent to stay. Nurses working in military hospitals bear unique responsibilities and tasks that differ from those associated with nurses working in local hospitals, such as supporting military missions and caring for war injuries (Suresh et al. 2021). The accumulation of these duties and tasks can cause psychological changes in nurses, thus leading them to adopt negative attitudes towards their responsibilities and missions; in turn, these attitudes reduce their job autonomy and intent to stay (House et al. 2022). The experience of empowerment enhances nurses' understanding of their own values and the significance of their work, thereby improving their sense of capability and autonomy in the performance of their tasks (Malak and Abu Safieh 2022). This situation has a positive impact that can encourage nurses to stay in military hospitals for an extended period.

Psychological empowerment is an important factor with regard to efforts to improve the nursing practice environment (Kennedy, Hardiker, and Staniland 2015), and the practice environment has an important effect on nurses' intent to stay (Wan et al. 2018). We further revealed that the nurse practice environment may play a mediating role in the relationship between psychological empowerment and intent to stay. The practice environment of military hospitals differs from that of other hospitals due to the strict military management that characterises the former, which results in a somewhat dry and serious atmosphere (Ranaei et al. 2022). Additionally, any mistakes made by nurses in this practice environment may have organisational and political consequences (Ranaei et al. 2022). All of these factors may reduce nurses' intent to stay. When nurses' psychological empowerment increases, they experience freedom from rigid control structures and perceive themselves as possessing influence and independence in the context of their professional duties (Li et al. 2018). This situation empowers nurses and offers them a sense of control and independence in their work, thus leading to increased engagement in hospital management and ultimately enhancing the practice environment for nurses, resulting in increased intent to stay (Patrician et al. 2022).

Psychological empowerment can influence burnout, and burnout can in turn influence nurses' intent to stay (Kim and Lee 2023; Şenol Çelik, Sariköse, and Çelik 2024). On this basis, we confirmed the mediating role of burnout in the relationship between psychological empowerment and intent to stay in further detail. Nurses frequently experience emotional impacts while caring for patients, including feelings of pain, loneliness and powerlessness (Jun et al. 2021). This aspect renders nursing a high-risk occupation, thus increasing the likelihood of burnout (Jun et al. 2021). Psychological empowerment plays a crucial role in addressing the managerial and systemic factors that contribute to nurse burnout (Li et al. 2018); this notion encompasses nurses' perceptions of the significance of their work, their competence in professional tasks, their involvement in decision-making processes within the organisation and their overall professional effectiveness (Li et al. 2018). When nurses experience a lack of psychological empowerment, such a situation may lead to increased burnout and decreased intent to stay (Ren and Kim 2023).

Finally, our research verified the indirect pathway of psychological empowerment → practice environment → burnout → intent to stay. The model indicated that psychological empowerment can affect intent to stay via the chain mediating effect of the practice environment and burnout. Nurses who exhibit higher levels of psychological empowerment tend to evaluate the practice environment more positively (Spence Laschinger et al. 2014). Such a positive environment may help reduce rates of burnout among

these nurses (Shah et al. 2021) and ultimately improve their intent to stay. In summary, the mechanism through which psychological empowerment affects intent to stay among nurses is complex, and we identified three indirect paths associated with this mechanism.

6.1 | Strengths and Limitations of This Work

This study offers significant value because it is the first to investigate the relationships among psychological empowerment, the practice environment, burnout and intent to stay in the context of military hospital nurses. These results provide valuable insights into the factors that influence intent to stay from multiple perspectives, thereby helping elucidate the underlying connections. This approach is crucial with regard to promoting intent to stay among nurses working in military hospitals.

However, we must recognise the limitations of our scientific investigation. First, it is vital to emphasise the fact that this study employs a cross-sectional design, that is, it can demonstrate only the correlations among variables and cannot establish causality. To obtain a deeper understanding of this topic, future research should consider employing a longitudinal approach. Second, this study did not explore the varying degrees of impact on intent to stay associated with different dimensions of psychological empowerment, nor did it examine the relationships between different factors and the various dimensions of psychological empowerment. Future research can focus in more detail on four aspects of psychological empowerment, namely, meaning, competence, self-determination and impact.

6.2 | Implications for Policy and Practice

This research introduces the novel concept that the practice environment and burnout could serve as crucial mediating factors in the relationship between psychological empowerment and intent to stay. This novel perspective can help hospital administrators explore new management strategies that they can use to retain experienced nurses and reduce turnover. Specifically, nurses often feel undervalued in comparison with physicians, thus leading to a lack of recognition of the meaning and impact of their work. To address this issue, managers should involve nurses in medical decision-making and encourage collaboration with doctors to increase nurses' psychological empowerment. Additionally, nurses working in military hospitals frequently perceive a lack of the empowerment necessary to improve their practice environment. As one effective way to address this issue, the head nurse could solicit suggestions from nurses regarding ways of enhancing clinical operations and communicate the feedback thus provided to hospital management. When nurses feel that they are valued by the hospital, they make active efforts to shape the clinical environment and influence their teams. Moreover, addressing the issue of high workload through the introduction of advanced resources such as sophisticated medical equipment can enhance the practice environment and alleviate burnout. In conclusion, promoting psychological empowerment among nurses and improving their practice environment are vital strategies with regard to mitigating burnout and increasing nurses' intent to stay.

7 | Conclusion

Both the direct and the indirect impacts of psychological empowerment on nurses working in military hospitals and their intent to stay are significant. The practice environment and burnout are crucial factors in this relationship, whether in the form of individual mediating factors or through a process of chain mediation. Among the three indirect pathways, the individual mediating effect of the practice environment has the greatest influence on intent to stay. Therefore, enhancing the nursing practice environment could simultaneously enhance the effect of psychological empowerment on nurses' intent to stay in military hospitals. Despite previous efforts on the part of nursing managers, the issue of nursing resource shortages persists. The introduction of psychological empowerment as a new management strategy may help address this problem and reduce turnover rates among nurses. The results of this study can not only help military hospital managers seeking to improve nurses' intent to stay but also have implications for other types of hospitals.

Author Contributions

C.J. and R.S. designed the study. R.S. and J.W. collected and conducted the data analysis. C.J., J.W. and J.D. prepared the manuscript. R.S. and J.D. offered methodology, supervision and review. All the authors have read and approved the final manuscript.

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Ethics Statement

This study was approved by the Medical Ethics Committee of the First Affiliated Hospital, Air Force Medical University (Approval No. KY20222252-C-1).

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The datasets used and/or analysed as part of the current study are available from the corresponding author upon reasonable request.

Peer Review

The peer review history for this article is available at https://www.webofscience.com/api/gateway/wos/peer-review/10.1111/jan.16460.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.