

Clinical Competencies Training Program and Its Effect on Nurses' Job Satisfaction and Intention to Stay: A Quasi-Experimental Study

¹Saleh Saer Albalawl; ²Abeer Mohamed Zakaria;

³Nehad Saad El-Wkeel

Corresponding Author: **Saleh Saer Albalawl**

Paper Number: 240504

<https://doi.org/10.68089/202609240504>

Abstract:

Background: Clinical competence training programs allow nurses to simulate real-life clinical scenarios, making decisions and avoiding clinical errors. Clinical competence training programs are vital in Saudi Arabia, considering the growing demand for skilled Saudi nurses in order to reduce dependency on foreign medical personnel. **Aim:** To assess the effect of clinical competencies training program on nurses' job satisfaction and intention to stay. **Methods:** Quasi-experimental (pre-test post-test) research design was employed in the medical and surgical wards of King Fahad Specialist Hospital, Tabuk, KSA, with a sample size of 250 nurses. Data collection was done using four measures, which include: Clinical Competency Assessment Tool for Nurses, Self-Perception of Clinical Competency Scale, Nurses' Job Satisfaction Scale, and Intention to Stay Scale. **Results:** Post-program mean scores of self-perceived clinical competence were statistically significantly higher than pre-program mean scores (43.61 ± 7.90 versus 36.08 ± 13.39 , $p=0.0001$). Post-program mean scores of job satisfaction were statistically significantly higher than pre-program mean scores (148.04 ± 28.86 versus 124.59 ± 47.12 , $p=0.0001$), while pre-program mean scores of intention to stay were statistically significantly higher than post-program mean scores (52.50 ± 6.31 versus 43.61 ± 7.90 , $p=0.0001$). The correlations between total scores of clinical competence assessments and total scores of job satisfaction, self-perception of clinical competence, and intention to stay were statistically significant positive among the studied nurses both pre-program and post-program ($p=0.0001$). **Conclusion:** Improvement of self-perception of clinical competency, job satisfaction, and intention to stay after implementing clinical competencies training program for nurses at King Fahad Specialist Hospital. **Recommendations:** Implementing structured clinical competency training programs should be done continuously as parts of the professional development of nurses to improve and increase their clinical competencies and knowledge, as well as actively participating in clinical competency training programs, workshops, and simulation training to enhance their professional knowledge and skills.

Keywords: Clinical Competencies, Job Satisfaction, Intention to Stay, Nurses.

Introduction

Clinical competence is essential to nursing practice because it is the foundation for the knowledge, technical skill and clinical judgment nurses require to provide safe, effective and evidence-based care. It is a multidimensional construct that combines cognitive, psychomotor and affective domains, and combines scientific expertise with ethical and compassionate practice (Aruldoss et al., 2022). Competence is therefore not simply the ability to carry out tasks correctly, but rather the nurse's ability to respond to the complexity and variability of patient conditions and to maintain professional and ethical standards of care (Basalamah & As'ad, 2021).

Increasing complexity of patient needs and the ever changing clinical demands have made competency based training an important strategy for the development and sustainability of nursing skills (Obeng et al., 2021). Structured educational interventions including simulation-based education, workshops and mentorship improve technical performance as well as nurses' confidence and critical thinking, resulting in better patient outcomes and professional growth for nurses (Bongalonta, 2022). In hospitals that value competency-based education, this often directly impacts the quality of patient care as well as the professional development of their nursing staff (Ulupinar & Aydogan, 2021).

In addition to its direct clinical impact, the development of clinical competence is increasingly acknowledged as being inherently linked to job satisfaction and workforce stability more generally. Clinically competent nurses are likely to feel more confident and less anxious about meeting the demands of their role, which is reflected in greater satisfaction with their work (Al-Dossary, 2022). Conversely, nurses who feel unprepared are more likely to experience occupational stress, job dissatisfaction, and intention to leave, all of which threaten the continuity of patient care and the performance of the healthcare organization (Alhawsah et al., 2025).

Job satisfaction itself is an outcome that has multiple dimensions, which are determined by intrinsic factors of motivation, such as job autonomy, job recognition, and promotion, and extrinsic organizational factors, including workload, staffing, and management (Spector, 2022). In situations when all these factors are compatible, then job satisfaction results in reduced turnover and better patient care; when they do not match, the result is job dissatisfaction, which leads to turnover and burnout (Aruldoss et al., 2022).

Another important variable closely associated with job satisfaction among nurses is intention to stay, which represents the extent of nurses' declared intention and commitment to continue working for their organization in the long run (Ghawadra et al., 2020). Intention to stay goes beyond the issue of daily job satisfaction to include not only nurses' optimism about their career in the future but also their feelings about the level of organizational support and congruence between their own and organizational values (Bright, 2021). In a healthcare system like that of Saudi Arabia, where the nursing workforce consists of both nationals and expatriates, retaining competent nurses becomes strategically important (Basalamah & As'ad, 2021).

At King Fahad Specialist Hospital, Tabuk, Saudi Arabia a tertiary referral hospital providing advanced specialized care for complex medical and surgical cases a competent, satisfied and stable nursing workforce is crucial for the continuity and quality of patient care. The links between clinical competence, job satisfaction and intention to stay have been well documented, but there is limited evidence of the effect of structured competency training on these outcomes within this setting. This gap led to the current study to assess the effect of clinical competencies training program on nurses' job satisfaction and intention to stay.

Aim of the Study

The aim of this study was to assess the effect of clinical competencies training program on nurses' job satisfaction and intention to stay.

Research Hypotheses

H1. Nurses' clinical competencies assessment improves after implementing the clinical competencies training program.

H2. Nurses' perception of clinical competencies improves after implementing the clinical competencies training program.

H3. Nurses' job satisfaction improves after implementing the clinical competencies training program.

H4. Nurses' intention to stay improves after implementing the clinical competencies training program.

Method

Design

A quasi-experimental (pre-posttest) design was used.

Setting

The study was carried out in the medical and surgical wards of King Fahad Specialist Hospital, Tabuk, KSA. This hospital is an important healthcare organization with a capacity of 500 beds.

Participants

A convenience sample of 250 nurses working in all inpatient units of the aforementioned setting was recruited. Eligible nurses were available during the data collection period, had at least one year of clinical experience, and agreed to participate voluntarily in the study.

Tools of Data Collection

Data were collected using four tools

Tool I, Clinical Competency Assessment Tool for Nurses

This tool consisted of two parts.

Part (1): It covered personal characteristics of the participants, including age, sex, educational level, years of experience, and working department.

Part (2): It was developed by the researcher, based on relevant literature Fukada, (2018), and Nabizadeh-Gharghozar, Masoudi Alavi & Mirbagher Ajorpaz, (2021), to assess nurses' clinical competency knowledge through 30 true/false statements, with each correct response scored as 1 and each incorrect response scored as 0. Total scores were categorized as low (<50%), moderate (50–70%), or high (>70%).

Tool II, Self-Perception of Clinical Competency Scale: It was developed by Cowan, Wilson-Barnett, Norman & Murrells, (2008), this scale assessed nurses' self-perceived clinical competence using 10 items rated on a 5-point Likert scale ranging from very little confidence (1) to very high confidence (5). Total scores were categorized using the same cutoff points as above.

Tool III, Nurses' Job Satisfaction Scale: It was developed and validated by João, Alves, Silva, Diogo & Ferreira, (2017), this scale comprised 37 items rated on a 5-point Likert scale from strongly disagree (1) to strongly agree (5), with total scores categorized as low, moderate, or high satisfaction using the same cutoff points.

Tool IV, Intention to Stay Scale: It was developed by Kovner, Brewer, Greene & Fairchild, (2009), this scale comprised 12 items rated on a 3-point Likert scale from disagree (1) to agree (3), with total scores categorized using the same cutoff points described above.

Validity and Reliability

The study tools were reviewed by a panel of five experts (three professors and two assistant professors) in the field of nursing administration to test the face and content validity of the tools. The minor changes, such as paraphrasing some items of the questionnaire, were done according to the suggestions from the panel before the use of the final tools. The internal consistency reliability was analyzed by using Cronbach's alpha coefficient and revealed the following scores: 0.787 for the Clinical Competency Assessment Tool, 0.804 for the Self-perception of Clinical Competency Scale, 0.792 for Nurses' Job Satisfaction Scale, and 0.792 for Intention to Stay Scale.

Pilot Study

The pilot study involved 25 nurses constituting 10 % of the total study sample population to assess how clear, relevant, and easy it was to use the study tools. The nurses involved in the pilot study were not included in the total study sample. The pilot study took place two weeks prior to data collection for the main study, and no changes were needed.

Ethical Considerations

Ethical approval was obtained from the Research Ethics Committee of the Faculty of Nursing, Mansoura University (Approval No. 425, December 12, 2023). Official permission was granted by the management of King Fahad Specialist Hospital, Tabuk, Saudi Arabia to undertake the research. All participants volunteered for participation, and signed informed consent was taken after explaining the purpose and methodology of the study. They were told that they had the right to leave the study at any point of time. All data collected were kept confidential and anonymous during the study period, and were used only for research purposes.

Data Collection Procedure

Data gathering and program execution was done through three major stages from the beginning of August 2024 to the end of March 2025.

The pre-program phase lasted for about three months (from the beginning of August to the end of October 2024). In this stage, the researcher personally interacted with the participants to give them information about the purpose of

the research and get permission to involve them in the process of data gathering. It should be stressed that the data gathering schedule was strictly kept through three days a week (Monday, Wednesday, and Thursday) in the morning and afternoon shifts (7:30 AM to 1:00 PM). This is necessary both for the clarification of some details and for the distribution of the four study instruments (I-II-III-IV) at the end of each shift. On average, each nurse spent 30-60 minutes filling in questionnaires.

In the second stage, the implementation of the training program took place with the intention of establishing the impact of the training program on nurses' job satisfaction and retention immediately after the training. The training program was done from the beginning of November 2024 through mid-December 2024 for each group, where there was a total of 8 hours of training provided in four one-week sessions. Each week entailed two hours of training, and the training program was done through the use of Power Point presentations, educational videos, lecturing, discussion, and brainstorming. The four tools used in the pre-test were repeated in the post-test.

The third stage entailed a follow-up assessment which was carried out after three months, at the end of March 2025. The researcher evaluated the outcomes of the experiment by carrying out comparisons between the follow-up outcomes and both the pretest outcomes and posttest outcomes using the four same questionnaires on all participant.

Results

Table 1: Personal characteristics of the studied staff nurses at King Fahad Specialist Hospital (n=250).

Personal characteristics	The studied nurses (n=250)	
	No	%
▪ Sex		
Male	40	16.0
Female	210	84.0
▪ Age years		
20-30	74	29.6
>30-40	90	36.0
>40-50	44	17.6

≥50	42	16.8
Mean±SD	37.17±7.81	
▪ Educational level		
Diploma	37	14.8
Bachelor degree	127	50.8
Master degree	30	12.0
PhD	56	22.4
▪ Experience years		
1-5	96	38.4
>5-10	54	21.6
>10-15	78	31.2
>15-20	22	8.8
Mean±SD	13.02±5.16	
▪ Works in the Hospital department		
Nursing	5	2.0
Stroke	10	4.0
Cardiac ward	17	6.8
ICU	4	1.6
CCU	24	9.6
Male surgical ward	68	27.2
Female surgical ward	45	18.0
Male Medical Ward	20	8.0
Female Medical Ward	13	5.2
Oncology	12	4.8
Emergency	22	8.8
OPD	10	4.0

Table 1 illustrates personal characteristics of the studied nurses in King Fahad Specialist Hospital, Tabouk, KSA. The majority of nurses were female (84%), the highest age group ranged >30-40 years (36%), with mean age of 37.17 years ± 7.81. Slightly more than half of nurses held bachelor degree (50.8%), more than

one third of nurses had 1-5 years of experience (38.4%), with mean experience was 13.02 years $\pm$ 5.16. most nurses were from male surgical wards (27.2%).

Table 2: Total clinical competence assessment score and level among the studied nurses in King Fahad Specialist Hospital, Tabouk, KSA pre and post training program (n=250).

Total clinical competence assessment (Each item was scored 0-1)	Total clinical competence assessment among the studied nurses pre and post training program (n=250)				x ² test p value
	Preprogram		Post program		
	No	%	No	%	
• Total clinical competence assessment level					
- Low level (0-14)	228	91.2	3	1.2	378.9650.0001**
- Moderate level (15-22)	17	6.8	78	31.2	
- High level (23-30)	5	2.0	169	67.6	
•Total clinical competence assessment scores (0-30)					
Range	0-29		0-30		
Mean±SD	7.98±4.98		23.99±4.34		
Z value	18.199				
p value	0.0001**				

*Statistically significant ($p < 0.05$) ** Highly Statistically significant ($p < 0.05$)

Table 2 illustrates the total clinical competence assessment score and level among the studied nurses. More than two thirds (67.6%) of the studied nurses had a high level of clinical competence post-program compared to 91.2% low level pre-program with a statistically significant difference ($p = 0.0001$). Mean scores of clinical competence assessment were significantly higher post-program compared with pre-program 23.99 $\pm$ 4.34 versus 7.98 $\pm$ 4.98, respectively, ($p = 0.0001$).

Table 3: Total self-perception of clinical competence score and level among the studied nurses in King Fahad Specialist Hospital, Tabouk, KSA pre and post training program(n=250).

Self-perception of clinical competence (Each item was scored 1-5)	Total self-perception of clinical competence among the studied nurses pre and post training program (No=250)				x ² test p value
	Preprogram		Post program		
	No	%	No	%	
• Total self-perception of clinical competence level					
- Low level (10-29)	72	28.8	19	7.6	166.733
- Moderate level (30-38)	50	20.0	38	15.2	0.0001**
- High level (39-50)	128	51.2	193	77.2	
•Total self-perception of clinical competence scores (10-50)					
Range	10-50		10-50		
Mean±SD	36.08±13.39		43.61±7.90		
Z value	6.140				
p value	0.0001**				

*Statistically significant ($p<0.05$) ** Highly Statistically significant ($p<0.05$)

Table 3 shows the total self-perception of clinical competence score and level among the studied nurses. More than three quarters (77.2%) of the studied nurses had a high level of self-perception of clinical competence post-program compared with 51.2% pre-program, with a statistically significant difference ($p=0.0001$). Mean scores of self-perception of clinical competence were also significantly higher post-program compared with pre-program 43.61 ± 7.90 versus 36.08 ± 13.39 , respectively, ($p=0.0001$).

Table 4: Total job satisfaction score and level among the studied nurses in King Fahad Specialist Hospital, Tabouk, KSA pre and post training program(n=250).

Total job satisfaction (Each item was scored 1-5)	Total job satisfaction among the studied nurses pre and post training program (No=250)				x ² test p value	
	Preprogram		Post program			
	No	%	No	%		
• Total job satisfaction level						
- Low level (37-73)	61	24.4	23	9.2	25.234	
- Moderate level (74-140)	62	24.8	53	21.2	0.0001* *	
- High level (141-185)	127	50.8	174	69.6		
•Total job satisfaction scores (37-185)						
Range	37-185		40-185			
Mean±SD	124.59±47.12		148.04±28.86			
Z value	4.717					
p value	0.0001**					

*Statistically significant ($p < 0.05$) **Highly Statistically significant ($p < 0.05$)

Table 4 illustrates the total job satisfaction score and level among the studied nurses. More than two thirds (69.6%) of the studied nurses had a high level of job satisfaction post-program compared with 50.8% pre-program, with a statistically significant difference ($p = 0.0001$). Mean scores of job satisfaction were also significantly higher post-program compared with pre-program 148.04±28.86 versus 124.59±47.12, respectively, ($p = 0.0001$).

Table 5: Total intentions to stay score and level among the studied nurses in King Fahad Specialist Hospital, Tabouk, KSA pre and post training program(n=250).

Total intentions to stay (Each item was scored 1-5)	Total intentions to stay among the studied nurses pre and post training program (No=250)	x ² test p value
--	--	--------------------------------

	Preprogram		Post program		
	No	%	No	%	
● Total intentions to stay level					
- Low level (12-35)	0	0	0	0	25.802 0.0001**
- Moderate level (36-45)	44	17.6	9	3.6	
- High level (46-60)	206	82.4	241	96.4	
●Total intentions to stay scores (12-60)					
Range	43-60		35-50		
Mean±SD	52.50±6.31		43.61±7.90		
Z value	6.140				
p value	0.0001**				

*Statistically significant ($p<0.05$) **Highly Statistically significant ($p<0.05$)

Table 5 shows the total intentions to stay score and level among the studied nurses. The majority (96.4%) of the studied nurses had a high level of intention to stay post-program compared with 82.4% pre-program, with a statistically significant difference ($p=0.0001$). Mean scores of intention to stay were statistically significantly higher pre-program compared with post-program 52.50±6.31 versus 43.61±7.90, respectively ($p=0.0001$).

Table 6: Correlation between total scores of clinical competence assessment and job satisfaction and self-perception of clinical competence and intentions to stay among the studied nurses in King Fahad Specialist Hospital, Tabouk, KSA pre and post training program(n=250).

Variables	Total clinical competence assessment scores of the studied nurses pre and post program (n=250)			
	Preprogram		Post program	
	r	p value	r	p value
Total job satisfaction scores	0.739	0.0001**	0.655	0.0001**
Total self-perception of clinical competence scores	0.518	0.0001**	0.572	0.0001**
Total intentions to stay scores	-0.238	0.0001**	0.505	0.0001**

*Statistically significant ($p<0.05$) **Highly Statistically significant ($p<0.05$)

Table 6 illustrates the correlation between total clinical competence assessment scores and total job satisfaction, self-perception of clinical competence, and intention to stay scores among the studied nurses. All pairwise correlations were statistically significant and positive among the studied nurses both pre-program and post-program ($p=0.0001$), except for the correlation between total clinical competence assessment scores and total intention to stay scores, which was statistically significant negative at pre-program ($p=0.0001$).

Discussion

In recent years, there has been a shift in focus regarding the importance of clinical competency, not only in its effect on patient care, but also in its effect on the psychological and professional life of the nurse. Clinical competency helps to build the confidence of the nurses in their clinical work, prevents occupational stress and prepares them for dealing with complex clinical situations. This is especially critical in fast-paced clinical settings, where effective decision-making and teamwork are paramount (Alhawsah et al., 2025).

This competency training is suggested as a way to bridge knowledge gaps and improve clinical judgments to allow nurses to provide quality care. This training program utilizes key components of clinical decision-making, leadership, communication, problem-solving, and emotional intelligence all important components in cultivating a well-rounded nursing professional. The knowledge and competencies gained through these activities are multi-faceted and will enhance the professional growth of the nurse, allowing her to become successful in the challenging clinical setting (Shawer et al., 2024).

In addition to its clinical performance, development of clinical competency is increasingly associated with job satisfaction and nurses' desire to stay in their jobs. Job satisfaction is one of the most crucial factors that relate to workforce stability, as it is associated with turnover intentions, work stress, and nurse's association with work. Nurses who are confident in their clinical practice tend to be happier with their work environment, and this can help reduce burnout and increase job satisfaction (Alhawsah et al., 2025). On the other hand, an inability to perform can lead to higher stress levels, dissatisfaction and higher intention to leave the organization, which negatively affects the continuity of healthcare and the performance of the organization (Al-Dossary et al., 2024).

Thus the current study was conducted with the find out the effect of implementing training program about clinical competencies on their job satisfaction and intention to stay in King Fahad Specialist Hospital, Tabouk,

KSA. Through the following parts: Regard nurse's clinical competencies knowledge in King Fahad Specialist Hospital., Regard self-perception of clinical competence in King Fahad Specialist Hospital, Regard job satisfaction in King Fahad Specialist Hospital, Regard intention to stay in King Fahad Specialist Hospital and Regard relationships between studied variables in King Fahad Specialist Hospital.

This current study indicates that there is an extremely statistically significant improvement in nurses' clinical competence assessment before and after the training program. This is likely due to the training program's emphasis on important aspects of clinical nursing practice including patient assessment, drug administration, infection prevention, emergency care, communication skills, and decision making based on evidence, among others, which were done using lectures, workshops, and simulation/ case-based learning.

This is in line with the findings by Chen et al., (2022), who determined that competency training programs had a positive impact on knowledge, judgment, and patient outcomes among nurses. Similarly, Gadhwal et al., (2024) found that structured and clearly defined training programs led to an increase in knowledge and outcomes related to clinical competency knowledge and skills, whereby the knowledge and skills of the trained nurses were significantly better than those of untrained nurses. In the same way, Shawer et al., (2024) found that completion of continuing training programs improved nurses' clinical concept knowledge and practice.

On the contrary, the findings of this investigation did not agree entirely with those of Lin et al., (2024), whose results indicated that although training programs might be very effective, they cannot achieve the required effect in clinical competence without support from certain conditions, like organizational support, mentorship, and positive institutional culture since even highly experienced nurses possessed high clinical competence regardless of their educational background. In the same way, according to Long et al., (2024), competence can be equally affected by the skills that were obtained through experience as well as short training courses since highly experienced nurses had high competence in spite of the lack of formal education.

In addition, the present study revealed that, there was a very strong statistical significance for the improvement in the perception of clinical competency by nurses after the training program, in terms of a greater number of nurses expressing high levels of confidence after the training than before. This can be

due to the design of the training program, which involves theoretical knowledge coupled with practical skills.

This results is in line with findings by Fernández-Castro et al. (2023) showing that educational interventions based on competencies had a significant positive effect on the self-confidence and self-efficacy of nurses in their clinical practice, where structured professional development was associated with more confidence in assessment, decision-making, and evidence-based practice. Likewise, Mohamed et al., (2024) showed that education had a positive influence on nurses' knowledge, attitude, and confidence that helped improve their professional practice. This conclusion was further supported by the findings of Cui et al. (2024), where training based on competencies improved confidence and perceived competence in clinical responsibilities of nurses (Ali, & Khalifa 2025).

On the other side, the present study contraindicated with Zarei et al., (2022) pointed out that factors other than training also affect self-perceived competence, which include the work environment, supervisor's support, interpersonal relations, and peer's perception of the nurses' skills. Therefore, changes in self-perception cannot be fully attributed to training alone. Similarly, Alotheimin, & Salem (2023) found out that organizational factors may have more influence on nurses' confidence compared to training interventions, and supportive leadership and mentoring can lead to higher levels of confidence despite any training received.

Job satisfaction plays a crucial role in securing a sustainable future for employees in any company because it determines employees' motivation, organizational commitment, productivity, professional well-being, and retention with a direct effect on the quality of health services. The findings of the current research showed a very statistically significant increase in nurses' job satisfaction after completion of the training program. The reason behind that can be the fact that the nurses with enough knowledge and competence about the clinical practice feel confident about their ability to perform tasks effectively and this leads to less stress, less uncertainty, more satisfaction, and professional well-being. The training program can be seen by nurses as the organization's effort in developing the professional competences of the nurses.

The results obtained are consistent with those of Ahmari et al., (2023), according to which professional development initiatives have a significant effect on job satisfaction and organizational commitment, since nurses who were acknowledged and trained within their organization showed high levels of satisfaction and professional satisfaction. Likewise, Al-Dossary (2022) observed

that education, favorable work environment, and organizational support were some of the key determinants of job satisfaction among Saudi nurses, and Alhawsah et al., (2025) found competency training to significantly contribute to job satisfaction and decrease stress levels.

But Alharbi, & Alilyyani, (2023) were not entirely supportive of this research because according to them, training does not have an exclusive impact on the job satisfaction level since the organizational conditions such as the work burden, number of staff members, leadership style, and remuneration play a more important role. In addition, similar factors were listed by Alshammari et al. (2025) among the key causes of dissatisfaction of nurses. It means that despite the benefits of the training programs, such as the current program, some organizational changes may be necessary for the results to become more pronounced.

In addition, the current study has found a very highly statistically significant change in the intention to stay of nurses after the training program, which could be attributed to the role of competency training in enhancing the self-confidence and job satisfaction of nurses since nurses who are competent and satisfied with their jobs are more likely to stay with their organization. The training program could be viewed by the nurses as a sign of the organization's investment in them.

This is consistent with the findings of Alqahtani et al., (2022), which established that organizational commitment and nurses' intention to remain are significantly influenced by professional development, as well as the findings of Yahyaei et al., (2022), which identified professional development as one of the most significant predictors of nurses' intention to remain. In a similar vein, Zhang et al., (2022) established that positive learning environment and support from supervision play a significant role in influencing nursing students' intention to remain in the field. This is also consistent with the findings of Meera et al., (2025), which established that competency management systems significantly influence turnover intention and organizational loyalty.

In contrast, not supported this study done by Alqahtani et al., (2024), found the most important elements affecting retention of nurses are salary, workload, family responsibilities, career growth, and organizational policies, whereas limited resources, shortage of staffing, and workload have been cited as the main causes of nurses' dissatisfaction and their intention to leave by Alshammari et al., (2025).

According to the current research findings, the relationship between the total score of clinical competence assessment and the total job satisfaction, as well as the relationship between clinical competence and perception of competence pre- and post-training, was statistically significant and positive. These results support the idea that nurses who are more competent are able to cope with the challenges at the clinical level better, which leads to less stress, increased efficiency and overall satisfaction with professional activity. They are supported by the findings of Fernández-Castro et al. (2023) on the strong association between the self-efficacy, professional competence and job satisfaction of nurses and the studies of Ali & Khalifa (2025) and Alotheimin & Salem (2023).

As well as, the relationship between clinical competence and intention to stay was not consistent across time points: a weak but statistically significant negative correlation was observed pre-program, which may reflect pre-intervention workplace stress or uncertainty despite a generally high baseline intention to remain, whereas this relationship reversed to become significantly positive post-program. This shift underscores the impact of the training intervention on nurses' attitudes, suggesting that as clinical competence and confidence improved, this was accompanied by a stronger, more coherent link to nurses' willingness to remain in the organization. Similar patterns were reported by Alhawsah et al., (2025), who found that competency-based programs were effective in increasing job satisfaction and reducing turnover intention among nurses, and by Nemati-Vakilabad et al., (2024) and Cubelo et al., (2024), who identified clinical competence as a strong predictor of both job satisfaction and retention intention.

Conclusion

The aim of the present study was to assess the effect of a training program for clinical competencies on job satisfaction and intentions to stay among nurses at King Fahad Specialist Hospital, Tabuk, Saudi Arabia. Results indicated that there was a statistically significant increase in the level of clinical competence assessment after the implementation of the training program. Moreover, there was a statistically significant increase in the levels of self-perception of clinical competence, job satisfaction, and intention to stay following the training program. Additionally, all the pairwise correlations between total clinical competence assessment scores and total job satisfaction, self-perception of clinical competence, and intention to stay scores were statistically significant and positive among the participants before and after the training program, with the exception of the correlation between clinical competence assessment and

intention to stay, which was statistically significant negative before the training program.

Recommendations

Recommendations for Hospital Directors

- The implementation of structured programs for the training of clinical competencies by nursing professionals periodically to keep their skills and knowledge updated.
- Including of competency-based education programs in the policies of hospitals and workforce development strategies to improve the performance of nurses.

Recommendations for Head Nurses

- Creating an atmosphere in which nurses can continue to learn and grow through education, discussion, collaboration, and professional development.
- Monitoring the competency of nurses on a regular basis and arranging training and support accordingly.

Recommendations for Staff Nurses

- Actively participating in clinical competency training programs, workshops, and simulation training in order to advance professional knowledge and skills.
- Application of newly learned skills and evidence-based practice in the nursing practice setting in order to ensure patient safety and quality of care.
- Ongoing learning for maintenance of competency in clinical practice.

Recommendations for Future Research

- Conducting longitudinal studies in order to understand the effects of competency training programs on the level of job satisfaction and retention.
- Conducting replication of this study in other health care organizations and in hospitals of Saudi Arabia through a large sample size.

Fund

Funding for this study was not provided by any organizations or any other sources.

Acknowledgement

The researcher wishes to extend his sincere thanks to the administration of King Fahad Specialist Hospital, Tabuk, and the nurses who were part of this study. The researcher also thanks the research supervisors for their assistance during the study.

Conflict of interest

The authors have no conflicts of interest to declare regarding this research study.

Author Address:

¹MSc. in Nursing, Senior Nursing Administration, Saudi Arabia

²Professor of Nursing Administration, Faculty of Nursing - Mansoura University, Egypt.

³Assistant Professor of Nursing Administration, Faculty of Nursing - Mansoura University, Egypt.

References:

- Ahmari, R., Qannass, S., Govallen, P., Moorkan, N., & Homoud, Z. (2023). *The Impact of Nurses Recognition, and Empowerment Related to Nurses Job Satisfaction at KFSH-D. Open Journal of Nursing.*
- Al-Dossary, R. (2022). *Leadership Style, Work Engagement and Organizational Commitment Among Nurses in Saudi Arabian Hospitals. Journal of Healthcare Leadership, 14, 71–81.*
- Alharbi, A., & Alilyyani, B. (2023). *The Effect of Emergency Nurses' Job Satisfaction and Intent to Leave on Patient Safety Culture: A Cross-Sectional Study. Nursing Forum.*
- Alhawsah, F., Sharahili, L., Al-thagafi, K., Alharbi, G., Sharahili, S., Awaji, R., Alghamdi, R., & Alzahrani, K. (2025). *Knowledge and Attitude Regarding Pressure Ulcer Care among Nurses in Saudi Arabia. Journal of Pioneering Medical Sciences.*
- Ali, E., & Khalifa, M. (2025). *Professional competency and moral courage among staff nurses. BMC Nursing, 24.*
- Alotheimin, H., & Salem, O. (2023). *The Impact of Saudi Nurses' Happiness on Their Turnover Intentions. Open Journal of Nursing.*
- Alqahtani, N., Oh, K., Kitsantas, P., Rodan, M., Innab, A., Asiri, S., Kerari, A., Hayyan, F., Alharbi, M., & Bahari, G. (2022). *Organizational Factors Associated with Evidence-Based Practice Knowledge, Attitudes, and Implementation among Nurses in Saudi Arabia. International Journal of Environmental Research and Public Health, 19.*
- Alqahtani, O., Alenazi, M., & Alanazi, W. (2024). *Factors Associated with Nurses' Intention to Leave in Saudi Arabia: A Literature Review. British Journal of Nursing Studies.*
- Alshammari, B., Alshammari, M., & Baghdadi, N. (2025). *The Association Between Missed Nursing Care and Job Satisfaction Among Nurses in Saudi Arabian Hospitals: A Cross-Sectional Study. Nursing Reports, 15.*

- Aruldoss, A., Berube Kowalski, K., Travis, M. L., & Parayitam, S. (2022). *The relationship between work-life balance and job satisfaction: Moderating role of training and development and work environment*. *Journal of Advances in Management Research*, 19(2), 240–271.
- Basalamah, M. S. A., & As'ad, A. (2021). *The role of work motivation and work environment in improving job satisfaction*. *Golden Ratio of Human Resource Management*, 1(2), 94–103.
- Bongalonta, M. B. (2022). *Relationship between organizational commitment dimensions and job satisfaction: The case of employees of Sorsogon State College Bulan Campus*. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(5), 910–918.
- Bright, L. (2021). *Does perceptions of organizational prestige mediate the relationships between employee engagement, satisfaction, and turnover intention?* *International Journal of Public Sociology and Sociotherapy*.
- Chen, S., Zhang, C., & Li, W. (2022). *The effects of competency-based training model in the training of new nurses: A meta-analysis and systematic review*. *PLOS ONE*, 17(11), e0277484.
- Cowan, D. T., Wilson-Barnett, D. J., Norman, I. J., & Murrells, T. (2008). *Measuring nursing competence: Development of a self-assessment tool for general nurses across Europe*. *International Journal of Nursing Studies*, 45(6), 902–913.
- Cubelo, F., Jabri, F., Jokiniemi, K., & Turunen, H. (2024). *Factors influencing job satisfaction and professional competencies in clinical practice among internationally educated nurses during the migration journey: A mixed-methods systematic review*. *Scandinavian Journal of Caring Sciences*.
- Cui, L., Dong, Y., Zhang, S., & Li, M. (2024). *Construction and application of procedural pathways combined with information management in nursing staff skills training system*. *BMC Medical Education*, 24.
- Fernández-Castro, M., López, M., Martín-Gil, B., Rodríguez-Soberado, P., Rivas-González, N., Muñoz-Alvaredo, L., Del Río-García, I., Redondo-Pérez, N., & Jiménez, J. (2023). *Nurses' evidence-based practice competence and hospital practice environment after specific training under the Best Practice Spotlight Organization® Programme: A cross-sectional study*. *Nurse Education Today*, 126, 105808.
- Fukada, M. (2018). *Nursing competency: Definition, structure and development*. *Yonago Acta Medica*, 61(1), 1–7.

- Gadhwai, R., Singh, J., Yadav, B., & Dhakar, J. (2024). Assessment of Knowledge and Skill of Nursing Staff in Tertiary Care Hospital. SSR Institute of International Journal of Life Sciences.
- Ghawadra, S. F., Lim Abdullah, K., Choo, W. Y., Danaee, M., & Phang, C. K. (2020). The effect of mindfulness-based training on stress, anxiety, depression and job satisfaction among ward nurses: A randomized control trial. *Journal of Nursing Management*, 28(5), 1088–1097.
- João, A. L. S., Alves, C. P., Silva, C., Diogo, F., & Ferreira, N. D. (2017). Validação de uma Escala de Satisfação dos Enfermeiros com o Trabalho para a população Portuguesa [Validation of a nurse job satisfaction scale for the Portuguese population]. *Revista de Enfermagem Referência*, 4(12), 117–130.
- Kovner, C. T., Brewer, C. S., Greene, W., & Fairchild, S. (2009). Understanding new registered nurses' intent to stay at their jobs. *Nursing Economic\$,* 27(2), 81–98.
- Lin, Y., Ni, C., Hsu, S., Tsay, S., & Tung, H. (2024). Effects of Length of Employment and Head Nurse Leadership Style on the Clinical Competency of Staff Nurses in Taiwan. *Journal of Nursing Research*, 32, e331.
- Long, J., Li, Y., Chen, W., Wu, X., Fu, R., Dong, L., Huang, Y., Yi, D., Xu, Z., Cheng, Y., Tan, Q., Zhang, L., & Ding, F. (2024). Geriatric nursing competence of clinical nursing staff at different hospital levels in Chongqing, China: A cross-sectional study. *International Journal of Nursing Sciences*, 11, 439–446.
- Meera, D., Kalyanasundaram, P., Kavitha, K., Bhuvaneswari, B., & Kavitha. (2025). A study on influence of competency management on employee retention among nurses in Coimbatore city. *Lex Localis – Journal of Local Self-Government*.
- Mirzaei, A., Imashi, R., Saghezchi, R., Jafari, M., & Nemati-Vakilabad, R. (2024). The relationship of perceived nurse manager competence with job satisfaction and turnover intention among clinical nurses: An analytical cross-sectional study. *BMC Nursing*, 23, 528.
- Mohamed, R., Alhujaily, M., Ahmed, F., Nouh, W., & Almowafy, A. (2024). Exploring the potential impact of applying web-based training program on nurses' knowledge, skills, and attitudes regarding evidence-based practice: A quasi-experimental study. *PLOS ONE*, 19.
- Nabizadeh-Gharghozar, Z., Masoudi Alavi, N., & Mirbagher Ajorpaz, N. (2021). Clinical competence in nursing: A hybrid concept analysis. *Nurse Education Today*, 97, Article 104728.

- Nemati-Vakilabad, R., Kamalifar, E., Jamshidinia, M., & Mirzaei, A. (2025). Assessing the relationship between nursing process competency and work environment among clinical nurses: a cross-sectional correlational study. *BMC Nursing*, 24.
- Obeng, A. F., Zhu, Y., Quansah, P. E., Ntarmah, A. H., & Cobbinah, E. (2021). High-performance work practices and turnover intention: Investigating the mediating role of employee morale and the moderating role of psychological capital. *SAGE Open*, 11(1), 2158244020988557.
- Shower, M., Cphq, H., & Abdullah, S. (2024). Enhance Staff Nurses' Proficiency and Knowledge in Wound Assessment and Management Using the NERDS & Stones Technique. *IOSR Journal of Nursing and Health Science*.
- Spector, P. E. (2022). *Job satisfaction: From assessment to intervention*. Routledge.
- Ulupinar, S., & Aydogan, Y. (2021). New graduate nurses' satisfaction, adaptation and intention to leave in their first year: A descriptive study. *Journal of Nursing Management*, 29(6), 1830–1840.
- Yahyaei, A., Hewison, A., Efstathiou, N., & Carrick-Sen, D. (2022). Nurses' intention to stay in the work environment in acute healthcare: A systematic review. *Journal of Research in Nursing*, 27, 374–397.
- Zarei, M., Mojarab, S., Bazrafkan, L., & Shokrpour, N. (2022). The role of continuing medical education programs in promoting Iranian nurses' competency toward non-communicable diseases: A qualitative content analysis study. *BMC Medical Education*, 22.
- Zhang, J., Shields, L., Yin, Y., Wang, J., Zhang, R., & Hui, X. (2022). The clinical learning environment, supervision and future intention to work as a nurse in nursing students: A cross-sectional and descriptive study. *BMC Medical Education*, 22.