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The Influence of Preceptorship and Onboarding Orientation Program on Competence and Job Satisfaction of Newly Graduated Nurses

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ABSTRACT

This research examines the relationship between preceptorship and onboarding orientation programs and clinical competence and job satisfaction in newly graduated nurses in the process of starting professional practice. Nursing transition programs are required to address the high turnover rates, work-related stress, and transition shock associated with the academic-clinical transition. It used a quantitative, descriptive and correlational research design where a sample of 100 newly graduated nurses in their first year of practice in a tertiary healthcare setting was used. Clinical competency development and nursing job satisfaction were measured through longitudinal; three-time point data collection using validated instruments. The results showed that both clinical competence and job satisfaction showed great improvement during the period. Duration of the program and program structure correlated positively with competence, with structured preceptorship coming out as the best predictor of improved clinical performance. Nonetheless, no considerable correlation was found between the feature of a program and job satisfaction, which refers to the role of other factors, including working environment, organizational support, and workload management. Moreover, there were no noteworthy variations in clinical departments and education levels. The paper highlights the significance of acutely structured onboarding policies, mentoring, and clinical training systems in the formulation of competence in newly graduated nurses. To enhance job satisfaction, nurse retention, and the overall quality of patient care, healthcare organizations must focus on evidence-based approaches to nurse transition and on the larger organizational factors.

INTRODUCTION

The academic training to professional clinical practice transition is a critical period, and a vulnerable one, in the life of a newly graduated nurse with far-reaching implications in terms of workforce sustainability and patient care outcomes (Hampton *et al.*, 2021; Rae *et al.*, 2025). In fact, empirical data always show that newly licensed nurses often complain that they are not ready to face the nuances of clinical settings despite their formal training (Lindfors *et al.*, 2021; Mohammad & Al-Hmairat, 2024). Research shows that as many as 30-50% of nurses upon graduation face some of the highest rates of stress and role transition shock in their first year of practice, and this adversely affects their clinical practice and mental health (Koh *et al.*, 2023; Sterner *et al.*, 2023). In addition, new nurse turnover rates are also staggering, with estimates showing that about 17-35% leave their first job in the first year, adding to the bottom line and staffing levels (Mohammad & Al-Hmairat, 2024; Prosen & Ličen, 2023).

In order to overcome such difficulties, there has been a steady introduction of preceptorship and onboarding orientation programs in healthcare institutions to make the transition to professional positions easier. Preceptorship, direct supervision, and mentorship by seasoned nurses have proved to help in the acquisition of clinical skills and professional confidence significantly. To illustrate, Feeg *et al.* (2022) introduced the results of structured

mentorship interventions in terms of increased scores of clinical competence and decreased anxiety in new registered nurses. In a similar manner, Chen *et al.* (2021) have established a correlation between transition support programs and better clinical decision-making skills and fewer errors during early practice. These results implicate the role played by guided experiential learning in closing that gap between theory and practice.

As part of integrating new nurses into organizational systems and cultures, onboard orientation programs are also important in shaping first-year professional experiences. Empirical evidence has shown that there is a positive relationship between job satisfaction, job retention, and structured orientation programs. According to Masso *et al.* (2022) The turnover intentions were significantly decreased, and workplace adaptation was enhanced with comprehensive onboarding programs that incorporated both clinical and socialization training. Prosen and Ličen (2023) A multi-country study discovered that among those who reportedly received structured orientation support, the newly graduated nurses scored significantly higher in job satisfaction one year after graduation than did those with less structured experiences (Dorgham *et al.*, 2022; Winarti *et al.*, 2025). These results indicate that successful onboarding not only improves individual performance but also helps an organization to stabilize.

Although preceptorship and orientation programs have

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the noted advantages, many spaces still exist in how they are designed, implemented, and sustained in healthcare environments. Such variability may give unequal results, as not all programs can offer enough exposure and guided assistance to attain the best results. There is an indication that the length and intensity of transition programs are the key factors in deciding their effectiveness. As an illustration, Masso *et al.* (2022) have found that the transition programs of moderate and large length and structure yielded moderate and large improvements in clinical competence and perceived support among newly graduated nurses. In contrast, the level of confidence or rather role ambiguity, was associated with shorter or ill-structured programs (Alghamdi & Baker, 2020; McDermott, 2023).

A key outcome of effective transition programs is clinical competence, a multidimensional concept that includes technical skills, critical thinking, and communication skills. Empirical evidence shows that nurses who have a structured preceptorship program that begins at the end of their graduation show significantly better competence scores than those nurses who receive little or no support (Dorgham *et al.*, 2022; McGregor *et al.*, 2024). Meanwhile, predictor satisfaction is another important predictor of workforce retention and long-term engagement. Research has indicated that those nurses who undergo positive transition environments are more inclined to record better job satisfaction, burnout, and enhanced organizational commitment. As an example, Kreedi *et al.* (2021) determined supportive work settings and the functioning of mentorship as the essential elements in nurse turnover prevention.

Nevertheless, as the current evidence on the effectiveness of transition programs points to the overall usefulness, there is a significant gap in the real-time knowledge of the way in which the particular features of the programs, in particular, the time of the transition, and the elements that characterize the program, should affect each other and impact clinical competence and job satisfaction. Literature analyzing such results has been done in several studies, with little to no study on how the results relate to each other within one framework. Secondly, no context-relevant studies analyzing these variables in single healthcare settings exist where organizational practices and resources can play a major role in the effectiveness of the program.

To overcome this gap, there is a need to develop evidence-based transition strategies to maximize the results of newly graduated nurses. Systematically comparing the effectiveness of program length and structure, healthcare organizations can define the main factors that lead to a successful integration and professional growth (Lindfors *et al.*, 2022; Miller *et al.*, 2023). These insights are especially important in clinical settings with high demand, where the competence and satisfaction of new graduate nurses are paramount in ensuring quality patient care and staff retention.

This paper seeks to determine the role of preceptorship

and onboarding orientation programs on newly graduated nurses during their first year of clinical practice. In particular, it aims to explore how the duration and the structure of the program influence clinical competence and to determine the association between structured orientation programs and job satisfaction. Moreover, the research aims to investigate the relationship between these variables to offer evidence-based guidelines on how to enrich transition programs in the clinical environment.

LITERATURE REVIEW

The role of preceptorship and onboarding programs in assisting new nurses to transition has been well-studied, with increasing empirical evidence to support the value of programs in enhancing transition outcomes (Kaldheim *et al.*, 2024; Masso *et al.*, 2022). Preceptorship, which can be described as a designed duration of supervised clinical practice with an expert nurse, has been constantly linked to quantifiable changes in clinical practice. It has been found that a newly graduated nurse with involvement in a formal preceptorship program has up to 20-30% better clinical competency scores than a nurse with informal or minimal supervision (Koh *et al.*, 2023; Rae *et al.*, 2025). This has been enhanced due to systematic feedback, immediate clinical instruction, and the chance to utilize theoretical understanding in a controlled environment. Also, preceptorship has been associated with fewer clinical errors in the early practice, and some studies also noted a reduction of medication and procedure errors by about 15% among supported novice nurses (Vázquez-Calatayud & Eserverri-Azcoiti, 2023).

In addition to clinical skill development, mentorship as a part of preceptorship programs has also been indicated to play a significant role in determining psychological adjustment and professional confidence. Nurses have a condition called reality shock, which is associated with a lack of consistency between school expectations and clinical realities. As empirical evidence suggests, around 40% of new nurses cite low confidence levels within the first six months of practice (Lima & Alzyood, 2024; Song *et al.*, 2024). Nevertheless, the impact of this effect has been shown to be reduced by structured mentorship, as researchers found that nurses who are regularly guided and provided with feedback have much higher scores on self-efficacy. Indicatively, nurses with mentorship support have been noted to experience a 25% rise in level of confidence during the three months they are employed compared with those who are not supported (Kreedi *et al.*, 2021; Prosen & Ličen, 2023). This psychological assistance is essential since it has been directly linked to enhanced clinical decision-making and patient safety outcomes.

Onboarding orientation programs also supplement preceptorship as they deal with organizational integration and role clarity. In contrast to the preceptorship, where the main emphasis is placed on learning clinical skills, orientation programs pay much attention to learning institutional policies, workflow, and professional

expectations (Masso *et al.*, 2022; McDermott, 2023). There is an indication that, with properly designed onboarding programs, role ambiguity may decrease by up to 30, enabling newly graduated nurses to adjust better to the requirements of the workplace (Kaldheim *et al.*, 2024; McGregor *et al.*, 2024). Recent research conducted on a large scale among nurses in hospitals that participated in extensive orientation programs indicated that the nurses who had the various orientation programs experienced much less stress, as well as a 22% decrease in early job dissatisfaction (Kwon *et al.*, 2025; Lewallen & Van Horn, 2025). The findings of these research studies highlight the significance of linking organizational socialization to clinical training to enable holistic transition experiences. The length of transition programs has proved to be a highly important determinant of the success of these programs. Studies have suggested that six months is the threshold time for finding the best results when programs are longer than six months in comparison to short interventions (Joseph *et al.*, 2022; Rae *et al.*, 2025). As an example, nurses who have completed longer preceptorship programs have shown better retention rates, with some studies showing retention rates over 18% higher than with more typical short-term preceptorship programs (Abdelaliem *et al.*, 2025; Miller *et al.*, 2023). The increased periods of the program enable repetitive exposure to more complicated clinical situations and lead to the gradual development and accumulation of skills. On the other hand, shorter programs would not be effective in giving enough time to competency development and this results in elevated stress and reduced level of performance among new nurses (Dorham *et al.*, 2022; Prosen & Ličen, 2023). Another important factor is the program structure that leads to successful results. Exceptional structured programs that involve standardized competency-testing, frequent feedback, and specified learning outcomes have proven to result in more consistent and quantifiable enhancements (Fawares *et al.*, 2021; Kwon *et al.*, 2025). Empirical data indicate that nurses involved in highly structured programs score much higher in clinical competence scale and job satisfaction scale. Conversely, non-structured or poorly structured programs are likely to lead to the inconsistency of learning experiences that may adversely affect performance and satisfaction (Alsalamah *et al.*, 2023; Reebals *et al.*, 2021). Indicatively, inconsistency in the quality of supervision and frequency of providing feedback has been noted to contribute to the variation in competency development amongst novice nurses after graduation.

Job satisfaction, as one of the key outcomes of transition programs, has been highly researched because of its high correlation with retention and organizational commitment. There is evidence showing that those newly graduated nurses who report greater job satisfaction have a reduced likelihood of leaving their jobs in the first year (Kreedi *et al.*, 2021; Lee *et al.*, 2024). Statistical analyses have demonstrated that as job satisfaction scores go up by one point, the chances of a turnover reduce by

about 10-15% (Miller *et al.*, 2023; Renkema *et al.*, 2024). The aspects of job satisfaction are perceived support, management of workload and the quality of interactions between the staff in the clinical setting (Rodessa *et al.*, 2020; Sterner *et al.*, 2023). These factors are helped by the structured orientation and preceptorship programs, which establish relationships of support and minimize uncertainty regarding a professional role.

Another interesting one is the correlation between clinical competence and job satisfaction. Research has found a positive relationship existing between these two variables, with correlation coefficients of $r = 0.30$ up to $r = 0.55$ in different health care settings (Lindfors *et al.*, 2022; Vázquez-Calatayud & Eserverri-Azcoiti, 2023). This implies that a nurse who is more competent in his or her clinical job is more prone to gain more job satisfaction. Such a relationship is explicable by the fact that there are higher levels of confidence and lower levels of stress in relation to competence, resulting in an improvement of overall work experience (Kwon *et al.*, 2025; Lee *et al.*, 2024; Winarti *et al.*, 2025). Moreover, the development of competence has been associated with reduced burnout, with some studies reporting a 20% reduction in burnout among nurses who viewed themselves as clinically competent (Lindfors *et al.*, 2021; Renkema *et al.*, 2024).

Although the effectiveness of preceptorship and onboarding programs has a strong amount of evidence, variations are present in the evaluation and implementation of the programs. There are numerous studies on clinical competence or job satisfaction as separate constructs that are independent of each other, without considering their interrelationship in a single frame (Kreedi *et al.*, 2021; Lindfors *et al.*, 2021). Moreover, measurement instruments, program designs and evaluation schedules are rather heterogeneous, which reduces the ability of comparative findings across studies. As an example, the difference in the outcomes reported can be caused by the differences in the means of assessing clinical competence, such as self-reported outcomes and objective skill assessment (Lewallen & Van Horn, 2025; Reebals *et al.*, 2021).

Also, although the importance of the duration and structure of the program is noted in other studies, the research has not empirically provided insight into how these two factors are likely to affect both the competence and job satisfaction among the same population (Koh *et al.*, 2023; Song *et al.*, 2024). Most of the studies use cross-sectional designs that limit the possibility of measuring any change in the course of time and the long-term effects of transition programs. This omission is especially important since the process of competence and satisfaction development is dynamic and changes during the initial year of practice (Lima & Alzyood, 2024; Rodessa *et al.*, 2020). Moreover, these relationships have not been studied in context-specific research, exploring them in the context of a particular healthcare organization, in which organizational culture and program execution can differ greatly.

These gaps need to be addressed to promote evidence-based nursing practice and enhance the outcomes of transitions among newly graduated nurses. An in-depth analysis of program properties and the outcome variables may yield insightful information on the processes by which the transition programs impact professional development. This evidence is vital to healthcare organizations interested in maximizing onboarding strategies, minimizing turnover, and improving the quality of patient care. Through analyzing the synergistic impact of program time and program design on clinical competence and job satisfaction, this paper provides a more comprehensive insight into the nature of transition programs and how they influence the early nursing career.

Hypotheses of the Study

H1: There is a strong positive correlation between structured preceptorship/onboarding orientation programs with the clinical competence of newly graduated nurses.

H2: There is high positive correlation between structured preceptorship/onboarding orientation programs and job satisfaction among newly graduated nurses.

H3: There is a significant predictive relationship between program characteristics, including supervision quality, feedback frequency, training quality, and program structure, and clinical competence and job satisfaction among newly graduated nurses.

MATERIALS AND METHODS

Study Design

The proposed study is a quantitative, descriptive, and correlational research design to investigate the impact of preceptorship and onboarding orientation program on clinical competence and job satisfaction by newly graduated nurses. Quantitative method enables objective measurement of variables and implements statistical methods to determine the relationship between the characteristics and outcomes of programs. A correlational design allows investigating relationships between independent variables (duration and structure of the program) and dependent variables (clinical competence and job satisfaction).

Study Setting and Context

This research takes place at King Abdullah Medical City in Makkah, which is a tertiary medical care facility that runs structured preceptorship and orientation programs for newly graduated nurses. Such programs comprise monitored clinical practice, skill assessment that can be done based on competency, and regular performance ratings that can be done by senior nursing personnel. These programs are designed in a way that makes them an appropriate place to study their effectiveness in helping newly graduated nurses to transition into professional practice.

Study Duration and Timeline

The study covers a time span of twelve months, which should give sufficient time to recruit the participants, baseline and follow-up data collection, data analysis and discussion of results. This time is also sufficient to meet the possible obstacles in participant availability and workload in the clinical environment.

Target Population

The population being targeted is newly graduated nurses in their first year of clinical practice, who are in preceptorship and onboarding orientation programs in the study setting. The population is chosen due to the first year of practice as one of the most significant transition periods when nurses build their clinical competence, adjust to working in a profession, and determine their job satisfaction rate.

Sample Size and Sampling Technique

The sample size is determined using G*Power statistical software, based on a significance level of 0.05 and statistical power of 0.80. The calculation considers the expected size effect based on the knowledge available in prior research on the connections between structured transition programs and outcomes like clinical competence and job satisfaction. In order to mitigate possible loss or incomplete responses, an extra margin is added to the computation. To this end, the study has around 100 participants. The convenience sampling method is employed, and in this case, all the eligible newly graduated nurses who fit the inclusion criteria are invited. The recruiting of the participants is done in consultation with the hospital administration. Eligible nurses are notified about the study via the institutional email communications, the informational materials that are posted at the nursing units of nursing, and brief presentations during the orientation sessions. The participation is voluntary, and the information concerning the purpose of the study, the procedures and the rights of the participants is detailed. It is made clear that there is no difference in the employment or performance ratings because of participation or lack of it. There are no monetary rewards provided.

Inclusion and Exclusion Criteria

The inclusion criteria are that the participants must be new nurses in their first year of practice in the clinical setting, be enrolled in a preceptorship or orientation program, and be willing to take part in the study period. Nurses who have over one year of clinical experience, those who have not enrolled in formal transition programs, and those on extended leave during the study period are excluded.

Study Procedures

The initial baseline data are gathered when the orientation

program starts to determine the levels of clinical competence and job satisfaction. Follow-up evaluations are done four months and nine months after the commencement of the program to measure changes as time goes by. Such a longitudinal design makes it possible to observe the increase or decrease in competence and satisfaction in the transition period and provides a comprehensive view of the effect of structured programs.

Data Collection Methods

Structured and validated instruments are used to collect data on the instruments to achieve consistency and reliability. Standardized clinical skill assessment checklists and supervisor evaluation forms, filled in by preceptors or the supervising nurses, are used to measure clinical competence. A validated questionnaire, e.g., the McCloskey/Mueller Satisfaction Scale, is used to measure job satisfaction and has been extensively utilized in nursing studies. The job satisfaction questionnaires are self-administered, and to reduce subjectivity, competence measures are taken by trained assessors to increase reliability.

Data Management

All the data obtained are saved in a safe electronic database using Redcap. All participants get an individual identification code to ensure anonymity, and no personal identifiers are present in the dataset. Only the principal investigator and authorized members of the research team have access to the data. Research governance policies ensure that the data are stored in secure institutional servers. The lack of data is recorded and dealt with through the correct statistical methods of analysis to maintain the integrity of the findings.

Ethical Considerations

Data are collected after gaining approval from the Institutional Review Board on its ethical suitability. All participants are provided with all the information about the study, and informed consent is obtained in writing. The subjects are made aware of their right to drop out at any moment with no repercussions. The research process is also confidential and private, and data is treated in harmony with the ethical standards.

Statistical Analysis

This data is analyzed in IBM SPSS. The data is filtered to remove errors, values missing, and outliers prior to analysis. Demographic characteristics and variables of the study are summarized using descriptive statistics, such as means, standard deviations, frequencies, and percentages. Pearson correlation analysis is done to test the relations among program characteristics, clinical competence, and job satisfaction. The prediction effects of program duration and program structure on the outcomes are determined by multiple regression analysis. An analysis of variance (ANOVA) is conducted to determine the differences in competence and job satisfaction between different groups based on the different program characteristics. The p-value of 0.05 is regarded as significant.

RESULTS AND DISCUSSIONS

The findings of this section are presented in statistics related to the influence of preceptorship and onboarding orientation programs on clinical competence and job satisfaction for newly graduated nurses. This involves demographic information, descriptive statistics, correlation analysis, regression analysis and results of ANOVA.

Demographic Characteristics of Participants

Participants' demographic data are provided in Table 1. The total sample size of newly graduated nurses was 100 (no missing responses were reported for any of the demographic variables). Most participants were females (59%) and males (41%). As far as educational qualification is concerned, all participants had a bachelor's degree in nursing, which is 100% of the study sample.

The participants were evenly spread throughout various clinical departments. The Medical Ward represented the largest proportion with 31% of participants, followed by Other with 24% and Emergency with 18%. The participants were divided into 16% of nurses in the ICU and 11% of nurses in the Surgical Ward. Of the nurses, 1% were no longer at work compared to 99% who stayed. The results suggest that high retention occurs within newly graduated nurses from the programs of onboarding and preceptorship. As shown in table 1

Table 1: Demographic Characteristics of Newly Graduated Nurses (N = 100)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	41	41.0
	Female	59	59.0
Education Level	Bachelor	100	100.0
Department	ICU	16	16.0
	Medical Ward	31	31.0
	Surgical Ward	11	11.0
	Emergency	18	18.0
	Other	24	24.0
Retention Status	Stayed	99	99.0
	Left Job	1	1.0

Descriptive Statistics of Study Variables

The descriptive statistics of the study variables are shown in Table 2. The mean age of the participants was 28.02 years with a standard deviation of 4.420 years; and the mean number of months in practice was 6.65 months with a standard deviation of 3.436 months. Results reveal that the respondents were at the early stage of their careers.

The average score for program length was 2.04 and the standard deviation was 0.724. There were progressive increases in clinical competence scores for the three assessment periods. At the beginning of the program, the mean competence score was 3.44 (SD = 0.592).

After 4 months the competence score was 4.14 (SD = 0.667); after 9 months, the score was further improved to 4.62 (SD = 0.582). The results of these are reflective of ongoing skills progression over time.

Likewise, the scores of the job satisfaction also went up during the study period. The overall satisfaction score was 3.97 (SD = 0.958) at the start of the programmer. The mean score was 4.36 (SD = 0.823) after 4 months, and 4.51 (SD = 0.745) after 9 months, respectively. This positive trend in satisfaction over time indicates that after graduating nurse satisfaction increased as they got more comfortable and adjusted to their profession.

Table 2: Descriptive Statistics of Study Variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Age	100	22	35	28.02	4.420
Months Experience	100	1	12	6.65	3.436
Program Duration	100	1	3	2.04	.724
Competence Beginning	100	2	4	3.44	.592
Competence 4Months	100	3	5	4.14	.667
Competence 9Months	100	3	5	4.62	.582
Satisfaction Beginning	100	2	5	3.97	.958
Satisfaction 4Months	100	2	5	4.36	.823
Satisfaction 9Months	100	2	5	4.51	.745
Valid N (listwise)	100				

Correlation Analysis

The Pearson correlation analysis results between supervision quality, feedback frequency, training quality, program structure, clinical competence variables and job satisfaction variables presented in Table 3. The outcomes revealed several important positive correlations between competence and satisfaction scores that were taken at various points of time.

Competence at the beginning of the program showed a strong positive correlation with competence after four months ($r = .738$, $p < .01$) and competence after nine months ($r = .461$, $p < .01$). Furthermore, competence at the 4-month point was highly correlated with competence at the 9-month time point ($r = .685$, $p < .01$). The results in this study suggest that those who achieved greater competence at the early phases of the program tended to achieve greater competence during the length of the program.

There were also good positive connections between job satisfaction variables. There was a strong correlation between satisfaction at the beginning of the program and satisfaction at the end of the four-month period ($r = .859$; $p < .01$) and the end of the nine-month period ($r = .785$; $p < .01$). In addition, satisfaction over the following four months was highly correlated with satisfaction after nine months, ($r = .900$, $p < .01$). This suggests consistency over time for satisfaction of newly graduated nurses.

The findings did indicate that the quality of supervision, frequency of feedback, training quality and program structure were not statistically significant related to competence and satisfaction variables. There were also no significant relationships observed between competence variables with satisfaction variables. The results indicate that while competence and satisfaction increased with time, the program characteristics that were measured were not directly related to the outcomes measured.

Table 3: Pearson Correlation Matrix of Program Characteristics, Clinical Competence, and Job Satisfaction

		Supervision_Quality	Feedback_Frequency	Training_Quality	Program_Structure	Competence_Beginning	Competence_4Months	Competence_9Months	Satisfaction_Beginning	Satisfaction_4Months	Satisfaction_9Months
Supervision Quality	Pearson Correlation	1	.065	.052	.078	.048	.123	.011	-.132	-.038	-.086

	Sig. (2-tailed)		.519	.609	.438	.633	.221	.910	.191	.708	.393
	N	100	100	100	100	100	100	100	100	100	100
Feedback Frequency	Pearson Correlation	.065	1	.088	-.129	.079	.058	-.110	-.028	.018	.057
	Sig. (2-tailed)	.519		.383	.202	.434	.568	.275	.782	.860	.573
	N	100	100	100	100	100	100	100	100	100	100
Training Quality	Pearson Correlation	.052	.088	1	.010	.123	.041	-.092	.098	.063	.091
	Sig. (2-tailed)	.609	.383		.922	.224	.684	.361	.331	.535	.366
	N	100	100	100	100	100	100	100	100	100	100
Program Structure	Pearson Correlation	.078	-.129	.010	1	-.002	.000	.060	.085	.072	.043
	Sig. (2-tailed)	.438	.202	.922		.986	.997	.553	.400	.479	.672
	N	100	100	100	100	100	100	100	100	100	100
Competence Beginning	Pearson Correlation	.048	.079	.123	-.002	1	.738**	.461**	-.066	-.059	-.010
	Sig. (2-tailed)	.633	.434	.224	.986		.000	.000	.517	.560	.921
	N	100	100	100	100	100	100	100	100	100	100
Competence 4Months	Pearson Correlation	.123	.058	.041	.000	.738**	1	.685**	-.041	-.038	-.003
	Sig. (2-tailed)	.221	.568	.684	.997	.000		.000	.687	.711	.978
	N	100	100	100	100	100	100	100	100	100	100
Competence 9Months	Pearson Correlation	.011	-.110	-.092	.060	.461**	.685**	1	.070	-.007	.009
	Sig. (2-tailed)	.910	.275	.361	.553	.000	.000		.490	.947	.930
	N	100	100	100	100	100	100	100	100	100	100
Satisfaction Beginning	Pearson Correlation	-.132	-.028	.098	.085	-.066	-.041	.070	1	.859**	.785**
	Sig. (2-tailed)	.191	.782	.331	.400	.517	.687	.490		.000	.000
	N	100	100	100	100	100	100	100	100	100	100
Satisfaction 4Months	Pearson Correlation	-.038	.018	.063	.072	-.059	-.038	-.007	.859**	1	.900**
	Sig. (2-tailed)	.708	.860	.535	.479	.560	.711	.947	.000		.000
	N	100	100	100	100	100	100	100	100	100	100
Satisfaction 9Months	Pearson Correlation	-.086	.057	.091	.043	-.010	-.003	.009	.785**	.900**	1
	Sig. (2-tailed)	.393	.573	.366	.672	.921	.978	.930	.000	.000	
	N	100	100	100	100	100	100	100	100	100	100

**, Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

A multiple regression analysis was performed to determine whether the supervision quality, frequency of feedback, quality of training, and program structure significantly predicted satisfaction after nine months. Table 4 shows the summary of the regression model. The resulting R value was .151 and an R square value was .023, which means that the predictor variables accounted for 2.3% of the variance of the 9-month satisfaction.

Overall, the ANOVA results reported in Table 5 revealed that the regression model was not significant, $F(4,95) = .557, p = .694$. The overall level of supervision, feedback,

training, and program structure was not a statistically meaningful predictor of job satisfaction after 9 months for newly graduated nurses.

The coefficient analysis in Table 6 further showed that none of the predictor variables were significant contributors to the model. The relationship between supervision quality and satisfaction was not statistically significant after nine months, but was negative ($\beta = -.100, p = .331$). There was a weak positive effect for feedback frequency ($\beta = .063, p = .542$) and a weak positive effect for training quality ($\beta = .090, p = .378$). The structure of the program also showed a slight positive relationship

with the satisfaction level at nine months ($\beta = .058$, $p = .574$). All the p -values were > 0.05 , and no variable was found to be significant in predicting satisfaction.

These results suggest that the external or organizational factors measured may have influenced job satisfaction to a greater degree than the factors measured in the program.

Table 4 : Model Summary for Multiple Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.151a	.023	-.018	.752

a. Predictors: (Constant), Program Structure, Training Quality, Supervision Quality, Feedback Frequency

A multiple regression model was used to create a model to test predictors of satisfaction after nine months; the resulting model is presented in Table 4. The R value (.151) and R-square (.023) reflect that overall, the variance

in measured program related variables in this study accounted for 2.3% of the variance and hence has weak predictive power.

Table 5: ANOVA Results for Multiple Regression Model

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	1.261	4	.315	.557	.694b
	Residual	53.729	95	.566		
	Total	54.990	99			

a. Dependent Variable: Satisfaction_9Months

b. Predictors: (Constant), Program Structure, Training Quality, Supervision Quality, Feedback Frequency

The ANOVA results of the multiple regression model are given in table 5. The model was not statistically significant, $F(4,95) = .557$, $p = .694$, meaning that the overall predictors have little or no meaningful explanation

of variation in job satisfaction at 9 months. Residual variation between participants was the main source of variation

Table 6: Regression Coefficients for Predictors of Satisfaction

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	4.130	.724		5.700	.000		
	Supervision Quality	-.094	.096	-.100	-.977	.331	.986	1.014
	Feedback Frequency	.055	.090	.063	.612	.542	.970	1.031
	Training Quality	.081	.092	.090	.886	.378	.990	1.010
	Program Structure	.056	.100	.058	.564	.574	.976	1.025

a. Dependent Variable: Satisfaction_9Months

Table 6 shows the regression coefficients for the various predictors of satisfaction after a 9 month period. There was no difference in any of the predictors, as all p values were greater than 0.05. There were weak negative, but

not significant, relationships with supervision quality, and weak positive, but not significant, relationships with feedback frequency, training quality and program structure.

Table 7: Collinearity Diagnostics for Regression Variables

Collinearity Diagnostics								
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Supervision Quality	Feedback Frequency	Training Quality	Program Structure
1	1	4.876	1.000	.00	.00	.00	.00	.00
	2	.046	10.342	.00	.03	.59	.00	.25
	3	.039	11.208	.00	.14	.09	.81	.02
	4	.031	12.466	.00	.66	.09	.03	.35

	5	.009	23.923	1.00	.17	.23	.16	.37
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a. Dependent Variable: Satisfaction_9Months

Collinearity Diagnostics

The collinearity diagnostics are presented in Table 7. Tolerance values between the range of .970 and .990, and variance inflation factor (VIF) values between the range of 1.010 and 1.031. All these values are within acceptable statistical limits and suggest that multicollinearity was absent amongst the predictor variables. The condition index values also showed that the regression model was statistically stable, and the independent variables did not overlap with each other to a great extent. The regression analysis was thus deemed appropriate for the analysis of the relationships between the variables in the study.

One-Way ANOVA Analysis

A one-way ANOVA analysis was conducted to determine whether significant differences existed in satisfaction

after nine months between participant groups. Table 8 shows the result of the ANOVA test. The results showed that the difference in satisfaction among the groups after 9 months was not significant, $F(1,98) = .434, p = .512$.

The between-group variability was not large when compared to the within-group variability; in other words, much of the difference among the satisfaction scores was within the group rather than between groups. The p-value was larger than the cut-off of 0.05, and the null hypothesis was therefore accepted.

The results indicate that the grouping variables of the participants did not have any significant effect on the results of satisfaction after nine months. In general, the results of the newly graduated nurses' satisfaction from the onboarding orientation and preceptorship programs were found to be quite equivalent.

Table 8: One-Way ANOVA Analysis of Satisfaction

Satisfaction_9Months					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.243	1	.243	.434	.512
Within Groups	54.747	98	.559		
Total	54.990	99			

Discussion

This study synthesized the effect of preceptorship and onboarding orientation on clinical performance and job satisfaction of newly graduated nurses in their first year of work. Results showed that competency and job satisfaction scores improved over a period at all assessment periods, reflecting the overall positive impact structured transition programs had on newly graduated nurses. Additionally, the relationships between program characteristics and the outcome variables were investigated using correlation, regression and ANOVA analyses (Kim *et al.*, 2025; Song *et al.*, 2024).

A significant finding of this study was that clinical competence increased over time from program entry to the 9-month follow-up time. The mean competence scores rose steadily across the years, indicating that new graduates experienced ongoing opportunities for clinical practice and guided learning experiences (McGregor *et al.*, 2024; Sterner *et al.*, 2023). This discovery corroborates other studies that found structured transition programs have a positive effect on the competence building of the novices. The enhancement of competence might be due to the repetition of clinical exposure, supervision, and experience in implementing the knowledge acquired in real clinical contexts (Vázquez-Calatayud & Esevenri-Azcoiti, 2023). The newly graduated nurses seemed to become more confident and proficient in clinical judgments as they grew more experienced, resulting in better performance during patient care activities. Likewise, for job satisfaction scores, an increase was noted

during the study period. After four months, there was an increase in satisfaction among newly graduated nurses, and after nine months, satisfaction further increased (Kim *et al.*, 2023; Kwon *et al.*, 2025). The results indicate that the process of transfer to the clinical environment was smooth and easier when participants adapted to it. This improvement in satisfaction may have been affected by increases in familiarity with the organizational routines, understanding of professional duties and relationships with colleagues in the workplace (Alsalamah *et al.*, 2022; Charette *et al.*, 2025). These orientation programs might have helped ease this transition with the provision of a reduced level of uncertainty and ease of professional integration into the healthcare environment.

Results of the correlation analysis showed that the competence scores were highly correlated at different times. Nurses' initial competence levels remained higher for those nurses who were more competent at the start of the program (Abdelaliem *et al.*, 2025; Çamveren *et al.*, 2022; Han *et al.*, 2021). This discovery suggests consistency of competence and suggests that adaptation and learning experiences early in the experience with a patient may have an impact on clinical performance. Equally, there were positive relationships between satisfaction variables at all time points, apart from the relationship between satisfaction with pay and satisfaction with pay-for-performance linkage that was slightly negative, suggesting consistency in participants' perceptions of their job satisfaction over time (Charette *et al.*, 2022; Hansen & Zuma, 2024).

This research showed some interesting, although insignificant, program characteristic-outcome variable relationships. There was no significant correlation between the supervision quality, frequency of supervision, training quality or program structure with competence or satisfaction measures. Further, regression indicated that these were not significant predictors of satisfaction after nine months (Feeg *et al.*, 2022; Masso *et al.*, 2022). Similar to the model explaining satisfaction, only a small proportion of the variance in job satisfaction was accounted for by the program factors measured by the survey, indicating a relatively weak influence on job satisfaction over the longer term (Hansen, 2021; Joseph *et al.*, 2022).

The results of this study are contrary to several previous studies, which determined that structured transition programmers and supportive supervision were the most significant predictors of competence acquisition for newly graduated nurses and job satisfaction for them. There may be several factors that could explain why significant relationships were not found in the present study (McDermott, 2023; Song *et al.*, 2024). First, the high and generally positive competence and satisfaction scores might have minimized variation within the sample, thereby precluding detection of statistically significant associations. Second, onboarding programs are not the only factor that determines job satisfaction; there are other organizational and individual factors (Sterner *et al.*, 2023; Thompson *et al.*, 2025). The factors of workload, staffing level, leadership style, workplace culture, interpersonal relationships and organizational support may have had a more significant impact on satisfaction among participants.

The results also indicated that there was no significant correlation between competence and job satisfaction variables. Higher competence levels were not necessarily associated with higher satisfaction levels, but there was a general increase in competence and satisfaction over time (Vázquez-Calatayud & Eseverri-Azcoiti, 2023; Winarti *et al.*, 2025). This implies that the transition period may be when professional competency and emotional/organizational satisfaction grow separately. Nurses entering the workforce can be clinically competent without having adequately addressed the issues that might lead to stress, workload, or other adjusting factors in the workplace, which could impact overall satisfaction (Kaldheim *et al.*, 2024; Lee *et al.*, 2024).

The ANOVA also did not find significant differences between the satisfaction of the participant groups. This means that there were no significant differences in satisfaction outcomes between the groups in the study. The findings indicate that, according to the student nurses, the onboarding and preceptorship experiences of these groups received similar levels of support and adjustment opportunities (Aldosari *et al.*, 2020; Charette *et al.*, 2022).

The results of the study are of significance for nursing management and nursing practice. Continuing

onboarding and preceptorship programs are needed for newly graduated nurses to help build their competencies, and these are best structured in healthcare organizations (Alsalamah *et al.*, 2022; Fawares *et al.*, 2021). While none of the measured aspects of the program were statistically significant indicators of satisfaction, the results of the overall improvements in competence and satisfaction suggest that transition support is still positive. Organizations should also be aware that job satisfaction is not a solely program-related phenomenon and that comprehensive organizational strategies are needed to affect job satisfaction (Aldosari *et al.*, 2020; Chung & Lim, 2025).

In general, this study emphasizes the value of nurse transition support for newly graduated nurses. Positive developmental outcomes over time, especially regarding clinical competence, were related to structured preceptorship and onset programs. The results do, however, highlight the importance of organizational and environmental issues to further improve job satisfaction, professional adjustment, and nurse retention in the longer term.

Limitations and Future Direction

This study has two main limitations. The first is that the findings were based on one healthcare institution, and the results might not be applicable to other hospitals or healthcare organizations with other organizational structures or induction processes. Second, subjective measures of job satisfaction were utilized, and this could have produced response bias and personal perceptions. In the future, more healthcare institutions should be included to enhance the generalizability of data, and larger sample sizes should be used. Furthermore, other aspects related to job satisfaction in newly graduated nurses would be further investigated in future studies, including leadership support, culture of the workplace, workload, and the environment of the organization. Longitudinal research that looks at the preceptorship and onboarding orientation program beyond the first year of practice could shed more light on the effects of these programs over a longer duration on nurse retention and nurse professional development.

CONCLUSION

This study investigated the impact of preceptorship and onboarding orientation on newly registered Nurses' clinical competence and job satisfaction. The results have shown that there were improvements in competence and satisfaction over the study period, suggesting that transitional programs through the regulated structures are beneficial to the early professional practice of newly graduated nurses. There were positive relationships between the competence measures and satisfaction scores, and these relationships were strong across the different time periods, indicating professional development and workplace adjustment that was consistent over time. Supervision quality, frequency of supervision feedback,

quality of training, and the structure of the program, however, did not significantly predict satisfaction after nine months, indicating that other organizational and workplace characteristics could affect job satisfaction. In conclusion, the study underscores the vital role of structured onboarding and preceptorship initiatives in helping newly graduated nurses build competencies, integrate professionally, and stay in their jobs, as well as the critical importance of a supportive work environment in promoting long-term job satisfaction and professional development.

The structured nurse preceptorship and orientation programs for newly graduated nurses should be reinforced in order to help them develop clinical competence and become competent professionals. Long-term work satisfaction and retention should also be increased through future programs that aim to increase workload, increase supervision quality, increase feedback, and increase support given in the workplace.

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