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ARTICLE

Comparing Student Nurses' Satisfaction with OSCE and Traditional Clinical Skill Assessment Methods

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ABSTRACT

Assessment of clinical skills is a crucial aspect of nursing education, ensuring that students acquire the necessary competencies to provide high-quality patient care. The Objective Structured Clinical Examination (OSCE) and the Traditional Method of Clinical Skill Assessment (TMCSA) are two commonly used approaches. This study aimed to compare student nurses' satisfaction levels with OSCE and TMCSA. A descriptive comparative study was conducted among 70 BSc Nursing students at a selected college of nursing. Data collection was performed using an observation checklist for cardiac assessment and a satisfaction rating scale. The data were analysed using mean, standard deviation, and *t*-test to compare satisfaction levels between OSCE and TMCSA. The study findings showed that 90% of student nurses were satisfied with TMCSA, whereas only 42.9% expressed satisfaction with OSCE. Statistical analysis indicated a significant difference in satisfaction levels ($t = 6.845$, $p = 0.000$), favouring TMCSA. The findings suggest that while OSCE is a structured and standardized assessment method, students perceive TMCSA as more favourable. This study highlights the need for a balanced approach to clinical assessment methods by integrating both traditional and modern evaluation techniques in nursing education. Such an approach not only enhances student satisfaction and clinical competence but also holds significant implications for pedagogy and innovation-encouraging educators to adopt more evidenced-based, student-centered and technologically enhanced assessment strategies that foster deeper learning and reflective practice.

Keywords: OSCE; TMCSA; Clinical Skill Assessment; Student Nurses; Satisfaction; Competency Based Education; Assessment in Nursing Education

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1. Introduction

In higher education, assessment refers to a range of methods used by educators to measure, evaluate, and document students' academic progress, readiness, and the acquisition of essential knowledge and skills. In medical and nursing education, the assessment of clinical skills is especially crucial, as it reflects a student's ability to apply theoretical knowledge in real-life healthcare settings[1]. The development and assessment of clinical skills are among the most critical aspects of nursing education, as they prepare students for the demands of real-world clinical settings. Moreover, effective assessment methods play a pivotal role in shaping students' cognitive processes, enhancing clinical judgment, and promoting reflective practice[2]. Hence, adopting a suitable method to assess clinical competence is an ongoing concern for clinical teachers, course coordinators, and medical educators. Learning will not be complete if the assessment method is inappropriate, because the students may not put in their full effort[3]. In nursing education, assessing clinical competence is a complex task that requires nurse educators to identify assessment strategies that are reliable, objective, and valid, particularly in the context of final examinations[1]. The evaluation of clinical skills plays a pivotal role in ensuring that students develop the competencies needed to deliver safe, effective, and evidence-based patient care. As a skill-oriented profession, the acquisition of psychomotor, cognitive, and affective skills is crucial in preparing a competent nurse graduate who can handle complex clinical situations[4]. Worldwide, assessing the clinical performance of nursing students remains a challenge for nurse educators because of the diverse and complex nature of nursing practice. Evaluating nursing students' competence is essential to ensure patient safety and maintain the quality of nursing practice. Nurse educators have identified OSCE and the traditional method of clinical skill assessment as the key methods to evaluate the nursing students' clinical performance[5–7].

The Objective Structured Clinical Examination originated at the University of Dundee in the early 1970s and was officially presented by Dr. Ronald Harden along with his coworkers in 1976[8]. It is a modern method of assessing clinical competence in which a student demonstrates clinical skills in a simulated condition. Students need to rotate through a series of stations. Each station tests a specific skill in a specified time duration of 5–10 min[9]. The number of OSCE stations varies from 12–15. Since the stations are independent of each other, the student can start at any of the stations and complete the cycle[10]. The OSCE method has been claimed to be an effective and powerful tool for evaluating the clinical nursing skills of nursing students. This method minimizes examiner bias, enhances objectivity, and provides opportunities for direct observation of student performance in simulated clinical situations[11]. Several studies have confirmed that OSCEs demonstrate strong validity, reliability, and educational impact, making them an effective tool for competency-based education[12–14]. Also, it is regarded as the gold standard and a universally accepted method for evaluating students' clinical competence in a comprehensive, reliable, and valid way[15].

In contrast, the Traditional Method of Clinical Skill Assessment (TMCSA)—which may include long-case examinations, oral viva, and ward-based evaluations—continues to be widely used in many nursing institutions. TMCSA often relies on real patients in clinical settings and emphasizes holistic patient assessment. While this approach reflects real-life practice and allows for a comprehensive evaluation of patient care, it has been criticized for subjectivity, variability in examiner expectations, and limited standardization[16]. The traditional clinical practical examination has been the major method for assessing the clinical skills of nursing students for many years[17]. This includes performing a particular clinical procedure at a clinical area on real patients. In this approach, examiners evaluate students based on their overall performance, theoretical knowledge through viva voce. However, this does not assess the problem-solving skill of students[2].

The use of well-designed assessment instruments to measure clinical competencies within a safe, effective, and controlled environment holds increasing significance in modern nursing curricula. Such tools not only support objective evaluation but also enhance the overall quality of clinical education. In this context, the present study aims to compare the level of satisfaction among nursing students with two methods of clinical assessment: the Objective Structured Clinical Examination (OSCE) and the Traditional Method of Clinical Skill Assessment (TMCSA).

A quasi-experimental study was conducted to compare the performance and feedback regarding the OSCE and traditional assessment methods among 124 nursing students in

Iran. The results revealed a statistically significant difference between the two groups in terms of CPR (Cardio-Pulmonary Resuscitation) skill scores and overall performance scores ($p < 0.05$), with the OSCE group outperforming the traditional group. Additionally, students in the OSCE group reported more positive feedback regarding the assessment method compared to those assessed through traditional means ($p < 0.05$). These findings indicate that the OSCE method not only enhances student performance in critical care skills but is also more favourably received. Therefore, it is recommended that the OSCE be adopted as a preferred method for evaluating nursing students' critical care competencies [10].

A descriptive study conducted in Saudi Arabia compared the effectiveness of OSCE with Traditional Clinical Examination among 96 undergraduate nursing students enrolled in a paediatric course. The findings revealed a statistically significant difference in students' total scores, with the OSCE group scoring notably higher (mean ± SD: 104.5 ± 15.6) than the TCE group (95.3 ± 17.5), with a *p*-value of 0.002. Moreover, a significantly higher proportion of students in the OSCE group (95.8%) achieved good exam scores compared to only 11.9% in the TCE group. Regarding time management, 19.0% of students in the OSCE group felt that the time allocated for each station or procedure was insufficient, compared to 8.3% in the TCE group. Additionally, 4.2% of OSCE students suggested allowing extra time for reading instructions. In terms of overall perception, 77.1% of OSCE students described the exam as "good," in contrast to 61.9% of students in the TCE group. Based on these results, the study recommends incorporating OSCE as an essential component of clinical assessment for undergraduate nursing students [18].

A quasi-experimental study conducted among 157 nursing students in southwest Nigeria assessed perceptions of the Objective Structured Clinical Examination (OSCE) compared to the Traditional Practical Examination (TPE). The findings revealed a statistically significant difference in mean scores, with students performing better in the OSCE (mean ± SD: 64.59 ± 5.15) than in the TPE (59.31 ± 2.92), $t = 3.29$, $p = 0.002$. Students perceived the OSCE as more objective than the TPE ($p = 0.000$), less time-consuming ($p = 0.010$), and capable of assessing a broader range of learned content ($p = 0.000$). It was also considered less destabilizing during the practical session ($p = 0.001$) and less stressful overall ($p = 0.002$). However, there was no significant difference in perception regarding which method required more preparation ($p = 0.097$). Furthermore, 56.8% of participants expressed a preference for OSCE over TPE ($p = 0.001$). The study underscores the importance of integrating OSCE as a core component in the evaluation of nursing students' clinical competencies [4].

A systematic review conducted by Bijayalakshmi Das involved 22 studies to evaluate the effectiveness of the Objective Structured Clinical Examination (OSCE) in comparison with traditional methods of practical examination. The review also identified key barriers to the implementation of OSCE in clinical assessment. The findings of the review indicated that students consistently achieved higher performance scores and expressed greater satisfaction, supporting OSCE as a credible and effective method of clinical evaluation. However, several challenges were also highlighted, particularly by educators involved in administering the examinations. The main issues identified include the need for a valid and reliable checklist, high costs associated with simulation models and materials, the requirement for a sufficient number of trained examiners, and the necessity of adequate physical space to accommodate multiple stations. Additionally, since each station demands equal and well-coordinated timing, logistical planning becomes crucial. Some educators also expressed concerns that deconstructing clinical skills into separate, individual tasks may oversimplify the complexity of real-life clinical situations, potentially reducing the authenticity and educational value of the assessment [19].

A comparative study [8] was conducted to evaluate the opinions and levels of satisfaction among 68 student nurses in Delhi regarding the Objective Structured Clinical Examination (OSCE) and the Traditional Method of Clinical Skills Assessment in relation to antenatal examination. Findings showed that students evaluated through OSCE achieved a mean score of 56.67, which was significantly greater than the 35.40 obtained by those assessed with the traditional method. The statistical analysis ($z = 39.09$, $p < 0.05$) confirmed the presence of a meaningful performance difference between the groups. In terms of perception, both groups reported a highly positive opinion of their respective assessment methods, with 97% (n = 33) in the OSCE group and 91% (n = 31) in the traditional group expressing favourable views. Similarly, the highest levels of satisfaction were reported by 97% (n = 33) of students assessed through OSCE and 94% (n = 32) of those assessed via the traditional method. In conclusion,

the study suggests that both OSCE and traditional methods are effective in assessing students' clinical skills, with OSCE showing a higher impact on skill performance and slightly greater student satisfaction and acceptance.

This study is significant as it provides empirical evidence on how OSCE compares to traditional clinical examination methods in nursing education. By analysing differences in student performance and satisfaction, the research aims to highlight the strengths and limitations of each method. The findings can serve as a basis for curriculum development, assessment reform, and the integration of more objective, student-centered evaluation tools in nursing programs. Ultimately, improving clinical assessment practices will contribute to the development of competent and confident nursing professionals capable of meeting the complex demands of modern healthcare systems. Although several studies have compared these methods in terms of objectivity, validity and reliability, there remains a lack of consensus regarding student satisfaction and experiential perception—key factors that influence learning outcomes and assessment acceptance.

The findings of this study hold significant implications for the advancement of nursing education, assessment practices, and curriculum development. By identifying differences in student satisfaction between OSCE and TMCSA, this research provides valuable insights that can guide educators, administrators, and policymakers in refining clinical evaluation strategies. When students view an assessment as relevant, transparent, and accurately reflective of their skills, it enhances the assessment's validity and supports positive learning behaviours. Therefore, examining satisfaction levels in OSCE versus TMCSA provides valuable insight into how each method supports meaningful learning outcomes, promotes confidence, and strengthens the quality of competency evaluation.

2. Materials and Methods

The present study was carried out as a part of a departmental research project within the Medical-Surgical Nursing Department at a selected nursing college. This research applied a quantitative approach using a descriptive comparative study design to assess student nurses' satisfaction with OSCE in comparison to the TMCSA. A total of 70 BSc Nursing students were chosen by the convenience sampling method, ensuring participation was voluntary. Inclusion criteria required that students be available during the study period and willing to provide written informed consent. Those students who were absent during the data collection process were excluded from the study sample. The study was executed at a selected nursing college after obtaining the ethical approval from the Institutional Ethics Committee (Approval No: CH/EC/Dec 2023/25, dated December 30, 2023).

2.1. Data Collection Tools

The following tools were developed and adopted by the researchers for data collection:

1. **Observation Checklist for Cardiac Assessment:**
   - This 10-item checklist was developed to assess the clinical skill performance of students using both OSCE and TMCSA methods.
   - The checklist covered essential cardiac assessment skills, ensuring a standardized evaluation process.
2. **Level of Satisfaction Scale:**
   - A 15-item rating scale was employed to measure students' satisfaction with OSCE and TMCSA.
   - The scale used a 3-point rating system (3 = Strongly Agree, 2 = Agree, 1 = Completely Disagree), with total scores ranging from 15 to 45.
   - For analysis, scores were categorized as follows:
     - **Satisfied:** 30–45
     - **Unsatisfied:** 15–29

2.2. Data Collection Procedure

Following approval from institutional authorities, the study procedure was explained to all participants before obtaining their informed consent. A pilot study was conducted, and suggested that it was feasible to conduct the study. The selected nursing students were observed performing cardiac assessments using both OSCE and TMCSA. The OSCE method required students to demonstrate their skills in a structured, station-based format, while TMCSA involved performing assessments in a real clinical setting under direct faculty supervision. After completing both assessments,

participants were provided with the satisfaction rating scale to evaluate their experiences with each method. The completed rating scales were collected 30 minutes later to ensure immediate feedback.

2.3. Ethical Considerations

Ethical clearance was obtained from the Institutional Ethics Committee before commencing the study.

3. Results

The collected data were analyzed using statistical methods, including mean, standard deviation, and the *t*-test. The *t*-test was applied to determine the statistical significance of differences in satisfaction levels between OSCE and TMCSA. The level of significance was set at $p < 0.05$. Descriptive statistics were used to summarize the findings, and results were presented in tables and figures for clarity.

3.1. Clinical Skill Scores of Student Nurses by OSCE and Traditional Method of Assessment

SD—Standard Deviation

Table 1 presents the comparison of the clinical skill scores of student nurses assessed through OSCE and TMCSA. Both methods had a possible score range of 0 to 20, but the obtained scores varied slightly between the two groups. Students assessed through OSCE scored between 10 and 17, with a mean score of 13.84 and a standard deviation of 1.32. In contrast, those assessed using the traditional method scored between 12 and 16, with a mean score of 14.15 and a standard deviation of 0.83. The mean difference between the two methods was 0.31, indicating that students performed slightly better in the traditional assessment method.

Table 1. Range, Mean, Standard Deviation and Mean Difference of clinical skill scores of student nurses.

Group	Possible Range of Score	Obtained Range of Scores	Mean Score	S.D.	Mean Difference
OSCE	0–20	10–17	13.84	1.32	0.31
TMCSA	0–20	12–16	14.15	0.83	

3.2. Level of Satisfaction Among Student Nurses Regarding OSCE and TMCSA

This section deals with the data pertaining to the assessment of the level of satisfaction regarding OSCE and TMCSA among student nurses.

The level of satisfaction regarding OSCE and TMCSA among student nurses is categorized as

- Satisfied: 30–45
- Unsatisfied: 15–29

The bar graph (**Figure 1**) illustrates the level of satisfaction among student nurses regarding the Objective Structured Clinical Examination (OSCE). According to the data, 57.1% of students reported being unsatisfied with OSCE, whereas 42.9% expressed satisfaction.

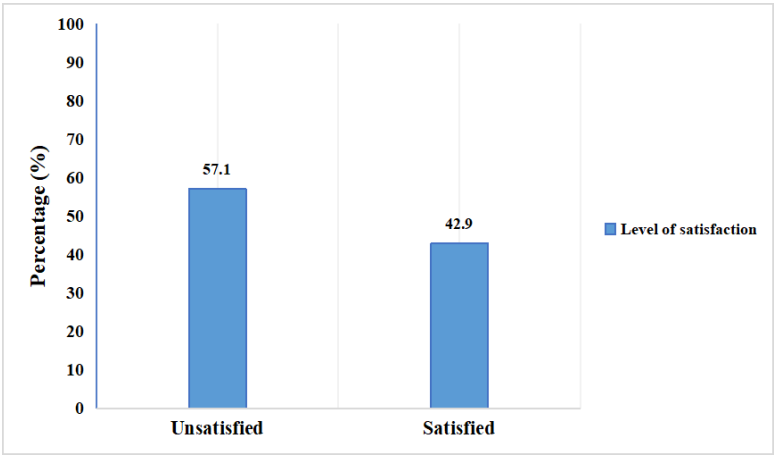


Figure 1. Bar diagram showing the level of satisfaction among student nurses regarding OSCE.

Figure 2 shows the level of satisfaction among student nurses regarding the Traditional Method of Clinical Skill Assessment (TMCSA). The data reveals that 90% of students reported being satisfied, while only 10% expressed dissatisfaction. This indicates a strong preference for TMCSA over OSCE, likely due to its familiar and less structured approach, which may provide a more comfortable and realistic clinical assessment experience.

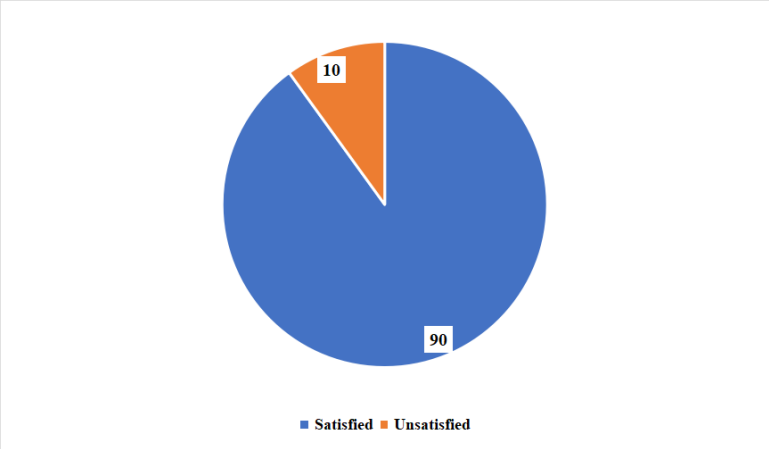


Figure 2. Pie diagram showing level of satisfaction among student nurses regarding TMCSA.

3.3. Comparison of Level of Satisfaction Scores Regarding OSCE and TMCSA Among Student Nurses

This section deals with the comparison of the level of satisfaction scores regarding OSCE and TMCSA. The *t*-test was applied to determine the statistical significance of differences in satisfaction levels between OSCE and TMCSA. The level of significance was set at $p < 0.05$.

The data in **Table 2** shows that the mean satisfaction score for TMCSA was 35.27, notably higher than the 29.90 mean score for OSCE. This suggests that students found TMCSA to be a more satisfactory assessment method. The standard deviation values were 5.278 for TMCSA and 5.295 for OSCE, indicating similar variability in responses for both methods. The statistical analysis showed a *t*-value of 6.845 and a *p*-value of 0.000, confirming that the difference in satisfaction levels between the two methods is statistically significant. Since the *p*-value is less than 0.05, the results strongly suggest that students preferred TMCSA over OSCE. The difference in satisfaction levels between TMCSA and OSCE is statistically significant. The *p*-value is 0.000, which is less than the conventional threshold of 0.05.

3.4. Comparison of Level of Satisfaction Scores Regarding OSCE and TMCSA Using Cohen's d

A Cohen's d of 1.02 indicates a large effect size (**Table 3**). This means that the difference between the two groups is substantial and educationally meaningful. In practical terms, the mean score of TMCSA is more than one full standard deviation higher than the mean score of OSCE. This suggests that TMCSA has a stronger positive influence than OSCE.

Table 2. Mean, Standard deviation and t value of the level of satisfaction scores regarding OSCE and TMCSA (n = 70).

Category	Mean	SD	df	*t*-Value	*p*-Value
TMCSA	35.27	5.278	69	6.845	0.000*
OSCE	29.90	5.295			

Note: *Highly significant.

Table 3. Mean, Standard deviation and Cohen's d value of the level of satisfaction scores regarding OSCE and TMCSA.

Category	Mean	Standard Deviation	Sample Size	Cohen's d Value
TMCSA	35.27	5.278	70	1.02
OSCE	29.90	5.295	70	

4. Discussion

The present study aimed to evaluate and compare student nurses' satisfaction with OSCE and TMCSA. The findings revealed that while 42.9% of the students were satisfied with the OSCE approach, a significantly higher proportion—90%—expressed satisfaction with TMCSA. This difference was statistically significant ($t = 6.845$, $p = 0.000$), indicating a clear preference for TMCSA among nursing students. This suggests that a majority of students found OSCE to be less favourable compared to other assessment methods, possibly due to its structured and standardized nature, which might induce stress or limit the flexibility of performance. The findings highlight the need to explore potential improvements in OSCE to enhance student experience and satisfaction. These results are consistent with a study conducted in Saudi Arabia, where 85% of students favoured TMCSA due to its realistic clinical environment and reduced stress levels compared to OSCE[1]. In a similar vein, another study[20] highlighted that students valued TMCSA for its real-world relevance and the comfort it provided in demonstrating clinical competencies. Furthermore, findings from another study conducted in Nigeria[21] concluded that although students appreciated the structured nature of OSCE, a considerable number found it less favourable than the traditional long case method due to time constraints and perceived difficulty. Additional studies[22, 23] have also echoed the present findings, suggesting that students viewed traditional assessments as more flexible and less stressful than the structured and somewhat artificial format of OSCE.

The findings of the study were in contrast with a comparative study conducted among student nurses in Delhi. The findings revealed that the mean skills score of the OSCE group (56.67) was higher than traditional group (35.40) with ($z = 39.09$, $p < 0.05$). The satisfaction level on OSCE and TMCSA was 97% and 94% respectively. The study concluded that there was no significant difference in satisfaction scores among students related to OSCE and traditional methods of clinical skill assessment[8]. Several studies have shown the effectiveness and satisfaction levels of OSCE and TMCSA, yielding mixed results. A study conducted on nursing students in India found that OSCE was perceived as an effective assessment tool, but students experienced significant anxiety due to its structured and time-limited nature. Their findings showed that 75% of students were satisfied with OSCE, which is considerably higher than the 42.9% satisfaction rate found in the present study[24]. The difference could be attributed to variations in OSCE implementation, student preparedness, and institutional training methods.

The present study contrasts with the findings of a comparative descriptive study conducted at the Nursing and Midwifery School of Mashhad. In that study, more than 52% of students expressed a high level of satisfaction with the OSCE method of evaluation compared to the traditional clinical examination. The difference was statistically significant, with a t-value of −2.017 and a p-value of 0.047. Despite the increased stress associated with various aspects of the OSCE, students appeared to be more satisfied with the scores they achieved through this method than those obtained via traditional assessments[21].

Findings from another study reported that a greater number of students expressed a preference for OSCE (73.8%)[9]. Students achieved higher performance in the Objective Structured Clinical Examination (OSCE) than in the traditional examination format, with statistically significant differences observed in both mean total scores ($p < 0.001$) and mean percentage scores. The findings of another study[9] highlight the superiority of the OSCE over the Clinical Practical Examination in assessing nursing students' clinical competence. Students perceived OSCE as more objective, well-structured and supportive of learning with reduced stress and improved preparation.

Similarly, another study conducted among 228 third-year paediatric nursing students at Benha University highlighted several advantages of the OSCE over the traditional clinical examination (TCE). The results showed that 94.7% of students agreed that the OSCE covered a wide range of clinical skills, while 82.5% felt it allowed them to compensate in different areas. Additionally, 85.9% believed it helped them focus on their areas of weakness, 80.7% reported being aware of the level of information expected, 93.9% agreed the tasks were clinically relevant, 87.7% felt the exam provided learning opportunities, and 70.2% believed the tasks aligned with the teaching objectives. In comparison, the TCE group reported lower percentages in each of these areas (92.1%, 76.3%, 77.2%, 81.6%, 85.9%, 85.9%, and 87.7% respectively). Furthermore, a majority of students in the OSCE group (81.6%) described the exam as less stressful,

compared to only 47.4% in the TCE group[2].

Similarly, another study found that the mean skill score for OSCE (56.67) was significantly higher than that of the traditional method (35.40), suggesting that OSCE provides a more standardized and objective evaluation of clinical skills[8]. Furthermore, their study reported that 97% of students were satisfied with OSCE, compared to 94% satisfaction with TMCSA, indicating no significant difference in preference. This contrasts with the present study, where TMCSA was clearly preferred. The discrepancy may be due to differences in student exposure, as OSCE is often perceived as more rigorous and challenging for nursing students compared to medical students. Another study[21] recommended that OSCE is an effective approach for evaluating clinical skills, as it ensures fairness and equality in assessment and fosters active learning, although students may experience stress prior to and during the performance of techniques. Few more studies[15, 25–27] also conclude that nursing students generally report higher satisfaction with OSCE as a credible and standardised assessment compared to traditional methods.

5. Conclusions

The assessment of clinical competence among nursing students, with emphasis on both their acquired skills and clinical judgment, represents a vital element in ensuring the quality of clinical education. Accurately assessing these competencies is essential for ensuring that students are adequately prepared for real-world healthcare practice. The method of evaluation chosen plays a significant role in determining the quality and accuracy of the assessment outcomes. A well-structured and appropriate evaluation method not only provides a clearer picture of students' actual abilities but also supports informed decision-making regarding their progress and readiness for clinical responsibilities. However, evaluating clinical competence remains one of the most challenging tasks for faculty members and clinical educators. This is due to the complexity of clinical skills, the variability in student performance across different contexts, and the need to ensure both objectivity and fairness in assessment. As such, careful consideration must be given to selecting assessment methods that are both valid and reliable, to truly reflect students' clinical knowledge, decision-making, and practical proficiency.

This study concluded a significant difference in student nurses' satisfaction levels between the Objective Structured Clinical Examination (OSCE) and the Traditional Method of Clinical Skill Assessment (TMCSA). While OSCE offers a structured, objective, and standardized approach, the majority of students expressed a clear preference for TMCSA, likely due to its familiar, less stressful, and contextually realistic environment. The findings revealed that 90% of participants were satisfied with TMCSA, compared to only 42.9% with OSCE, a statistically significant difference. These findings highlight an important balance between the strengths and challenges of the Objective Structured Clinical Examination (OSCE). While the OSCE is widely praised for its reliability, structure, and comprehensive evaluation of clinical skills, it does not always align with the expectations and comfort levels of students. Many learners find the format unfamiliar and, at times, stressful, which can affect their overall satisfaction. Given this, there is growing support for a blended assessment strategy that thoughtfully integrates the advantages of both OSCE and traditional clinical assessment methods. Such an approach can harness the objectivity and standardization of the OSCE, while also preserving the familiarity and contextual relevance that traditional methods offer. This combination is likely to provide a more balanced, effective, and student-centered evaluation experience that promotes both clinical competence and learner confidence. Looking ahead, future research should focus on developing and implementing strategies that reduce the anxiety and pressure often associated with OSCEs, without compromising their essential qualities of fairness, rigor, and validity. By doing so, educators can create assessment environments that are not only robust and objective but also supportive and motivating for students.

5.1. Recommendations

In light of the findings of the current study, the following recommendations are suggested:

- Adopt a blended assessment approach that combines the structured and objective nature of the OSCE with the familiarity and contextual relevance of traditional methods (TMCSA) to provide a more balanced and student-centered evaluation experience.

- Introduce orientation and preparatory sessions before OSCE assessments to help students understand the format, reduce anxiety, and build confidence in their clinical performance.
- Implement formative OSCEs throughout the academic year to give students regular opportunities to practice clinical skills in a low-stakes environment and receive constructive feedback.
- Create a supportive and psychologically safe assessment environment by training faculty and examiners in empathetic communication, clear expectations, and consistent evaluation criteria.
- Regularly collect and analyze student feedback on assessment methods to continuously improve the design and delivery of clinical evaluations and ensure alignment with student needs.
- Incorporate stress-reduction strategies such as relaxation techniques, peer support, and pre-assessment counseling to minimize performance-related anxiety during OSCEs.
- Ensure alignment of assessment tasks with teaching objectives and clinical relevance, so that students perceive assessments as fair, meaningful, and reflective of their learning.
- Encourage faculty development programs to improve the consistency, objectivity, and fairness of both OSCE and traditional assessment methods.

5.2. Limitations

- The study was conducted among a limited number of participants (70 BSc Nursing students), which may restrict the generalizability of the findings to a larger population of nursing students.
- The research was carried out in a single nursing college, and therefore, the results may not reflect variations in teaching–learning environments, assessment practices, or institutional resources present in other colleges or universities.
- The use of convenience sampling may have introduced selection bias, as participants who were available and willing to take part may not represent the full diversity of student experiences and perceptions.
- The study focused specifically on cardiac assessment skills, which may not fully represent student satisfaction or performance across all areas of clinical competence.
- Satisfaction was measured immediately after the assessments, which may not capture long-term perceptions or the sustained impact of each method on clinical learning outcomes.

5.3. Implications

The findings of this study have several important implications for nursing education, clinical assessment practices, and curriculum planning.

- Strengthening Assessment Approaches.
- Enhancing Student Preparedness.
- Improving Assessment Acceptability.
- Faculty training and standardization.
- Curriculum Development and Review.
- Foundation for Future Research.

Author Contributions

R.T.I. was the lead author who planned and implemented the study in close collaboration with J.J. (Julia Jose), J.J. (Jency Jose), and N.K. R.T.I., J.J. (Julia Jose), and N.K. carried out the literature search. J.J. (Julia Jose) and J.J. (Jency Jose) contributed substantially to data collection along with R.T.I. and N.K. R.T.I., in close collaboration with J.J. (Julia Jose), J.J. (Jency Jose), and N.K., did the data coding. J.J. (Julia Jose) and J.J. (Jency Jose) performed the data analysis and interpretation of results with others. R.T.I. provided suggestions and guidance for the study as an expert in the research field in all phases of the study. R.T.I. drafted the manuscript in alliance with J.J. (Julia Jose), and all authors revised the draft at all stages up to finalization. All authors read and approved the final manuscript.

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Institutional Review Board Statement

The study was conducted at a selected nursing college after obtaining the ethical approval from the Institutional Ethics Committee (Approval No: CH/EC/Dec 2023/25, dated December 30, 2023).

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

All the significant data collected had been reported in the study results. Since the data collection was done on a condition of anonymity, there is a limitation to share it publicly.

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Conflicts of Interest

There is no conflict of interest.

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