

EVALUATE THE EFFECTIVENESS OF OSPE IN ENHANCING THE PERFORMANCE AND SATISFACTION OF NURSING STUDENTS IN UDAIPUR, RAJASTHAN.

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ABSTRACT

Introduction: Objective Structured Practical Examinations (OSPE) have become a critical method in nursing education for assessing clinical competencies. This study evaluates the effectiveness of OSPE in enhancing the performance and satisfaction of nursing students in psychiatric nursing at a selected college in Udaipur, Rajasthan.

Methodology: This study employed a quantitative research approach with a pre-experimental one-shot case study design. Conducted at Sunrise College of Nursing, Udaipur, Rajasthan, participants included third-year B.Sc. nursing students with clinical placements in psychiatric nursing. The sample comprised 20 students, selected through a convenient sampling technique and divided equally into experimental and control groups. Data collection tools included a baseline characteristics proforma, a structured checklist for performance assessment, and a satisfaction questionnaire. Data analysis involved descriptive and inferential statistics, including T-tests, ANOVA, Chi-square tests, and correlation analysis. **Results:** The experimental group demonstrated significantly higher mean performance scores (22.10 vs. 18.00) and satisfaction levels (77.60 vs. 55.20) compared to the control group, indicating a positive impact of the OSPE intervention. The mean difference in performance scores was 4.10 (($p = 0.044$)), and in satisfaction scores, it was 22.40 (($p = 0.001$)). Significant associations were found between socio-demographic variables and both performance and satisfaction, particularly prior academic performance. **Conclusion:** The study concludes that OSPE is an effective assessment tool in psychiatric nursing education, significantly enhancing student performance and satisfaction. These findings support broader adoption of OSPE in nursing education to ensure objective and reliable evaluations of clinical competencies.

KEYWORDS: OSPE, Psychiatric nursing education, clinical competencies, performance assessment, student satisfaction.

INTRODUCTION

Objective Structured Practical Examinations (OSPE) have become an increasingly important method in the field of nursing education, particularly in the assessment of clinical competencies. Ensuring that students are proficient in practical skills and capable of applying theoretical knowledge in real-world settings is crucial in nursing education. According to a survey conducted by the National League for Nursing (NLN) in 2020, 75% of nursing programs in the United States have adopted OSPE or OSCE methods for clinical assessments. The primary reasons cited for this adoption include increased reliability (80%), enhanced objectivity (76%), and improved student feedback (72%) compared to traditional assessment methods.^[1] OSPE offers a structured and standardized approach to evaluating these competencies, thereby providing a more objective and

comprehensive assessment compared to traditional methods.

In recent years, the nursing education landscape has witnessed significant shifts towards adopting more innovative and effective assessment methods. Traditional practical examinations, often criticized for their subjectivity and lack of standardization, have been gradually supplemented or replaced by OSPE. This method, inspired by the Objective Structured Clinical Examination (OSCE) used in medical education, involves a series of stations where students perform specific tasks under direct observation. A study conducted by Alinier et al. (2006) found that OSPE significantly improved the performance scores of nursing students compared to traditional methods, with a mean score difference of 12.5%.^[2]

OSPE's structured format ensures that each student is assessed against the same criteria, minimizing examiner bias and enhancing the reliability of the evaluation process. The use of OSPE in nursing education, particularly in psychiatric nursing, is of considerable interest given the unique challenges associated with this field. Psychiatric nursing requires a high level of interpersonal skills, clinical acumen, and the ability to manage complex patient behaviors, making the need for rigorous and reliable assessment methods even more critical.^[3]

Previous studies, such as that by Harden and Gleeson (1979), have highlighted the importance of combining quantitative and qualitative data to provide a more comprehensive evaluation of educational interventions.^[4]

Despite the recognized advantages of OSPE, there is limited empirical evidence on its effectiveness in psychiatric nursing education, especially in the context of nursing colleges in India. According to a 2019 study by Sharma and colleagues, only 30% of nursing colleges in India have fully implemented OSPE in their curriculum.^[5] The primary objective of this study is to assess the effectiveness of OSPE in enhancing the clinical performance and satisfaction of third-year B.Sc. nursing students in the mental status examination. By comparing the outcomes of students subjected to OSPE with those assessed using traditional methods, this research aims to provide insights into the benefits and potential challenges of implementing OSPE in psychiatric nursing education.

METHODOLOGY

Research Design:- This study utilized a quantitative research approach with a pre-experimental one-shot case study.

RESULT

Table 1: Demographic Characteristics of Participants.

Demographic Variable	Category	Experimental Group (n=10)	Control Group (n=10)
Age	20 years	3 (30%)	2 (20%)
	21 years	4 (40%)	5 (50%)
	22 years and above	3 (30%)	3 (30%)
Medium of Instruction	Hindi	4 (40%)	5 (50%)
	English	6 (60%)	5 (50%)
Religion	Hindu	7 (70%)	8 (80%)
	Christian	1 (10%)	0 (0%)
	Muslim	2 (20%)	2 (20%)
Basic Education	Higher Secondary	8 (80%)	9 (90%)
	Graduate	2 (20%)	1 (10%)
Native State	Rajasthan	10 (100%)	10 (100%)
Domicile	Rural	6 (60%)	5 (50%)
	Urban	4 (40%)	5 (50%)
Percentage of Marks Obtained in Last Year	75-100%	2 (20%)	2 (20%)
	60-74%	7 (70%)	6 (60%)
	50-59%	1 (10%)	2 (20%)

Study Setting and Participants:- The research was conducted at Sunrise College of Nursing in Udaipur, Rajasthan. Participants were third-year B.Sc. nursing students with clinical placements in psychiatric nursing.

Sampling Technique and Sample Size:- A convenient sampling technique was used. The pilot study included 20 nursing students, with 10 in the control group and 10 in the experimental group.

Data Collection:- Data were collected using three main tools: a baseline characteristics proforma, a structured checklist for performance assessment, and a satisfaction questionnaire. The experimental group underwent the OSPE intervention with various task stations and standardized checklists, while the control group was assessed using standard methods.

Data Analysis:- Data were analyzed using descriptive and inferential statistics. Descriptive analysis included frequencies, percentages, means, and standard deviations. Inferential analysis involved T-tests for mean comparisons, ANOVA for differences across colleges, Chi-square tests for categorical relationships, and correlation analysis using Pearson and Spearman coefficients. Data were securely entered, validated, and analyzed with statistical software to ensure reliability and validity.

Ethical Approval

The study was approved by the Institutional Ethics Committee at the selected nursing colleges. The ethical clearance ensured that the study met all ethical standards and guidelines, including the protection of participants' rights and confidentiality.

Table 1 reveals that the experimental and control groups in the pilot study are relatively comparable. Both groups had a similar age distribution, with the majority of students being 21 years old. The medium of instruction was evenly split between Hindi and English, although the experimental group had slightly more students instructed in English. Most participants in both groups were Hindu, with a small representation of Christians and Muslims. Both groups predominantly had a higher secondary

education background, with the experimental group having a slightly higher percentage of graduates. All participants were from Rajasthan, ensuring regional consistency. The domicile distribution was also similar, though the experimental group had a slightly higher percentage of students from rural areas. Academic performance in the last year showed most students scoring between 60-74%, with similar percentages in higher and lower performance brackets.

Performance Assessment

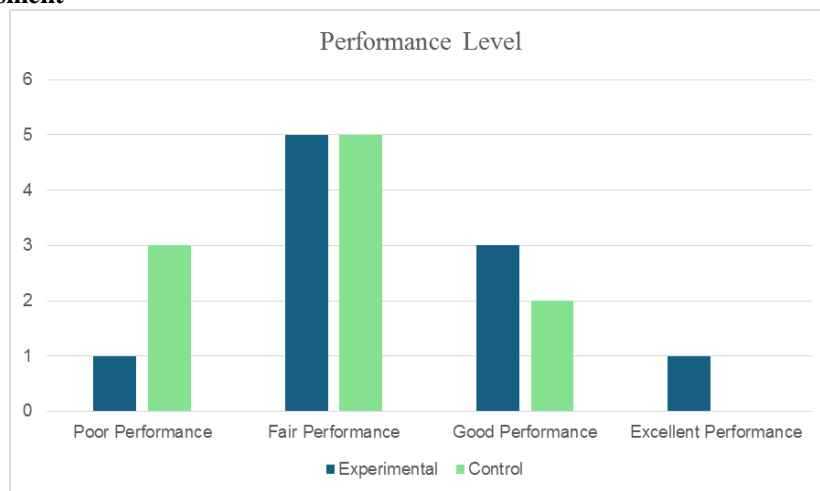


Figure 1: Bar Graph showing Performance Level.

The experimental group showed better performance overall, with fewer instances of poor performance and

more instances of good and excellent performance compared to the control group.

Satisfaction Assessment



Figure 2: Bar Graph showing Satisfaction Level.

The experimental group reported higher satisfaction levels, with more students rating their experience as good

or excellent, while the control group had higher frequencies of poor and fair satisfaction levels.

Table 2: Effectiveness of OSPE (Pilot Study)

Measure	Group	Mean	S.D.	Mean Difference	t-Test Value	P Value	Result
Performance Scores	Experimental	22.10	5.293	4.10	2.164	0.044	Significant
	Control	18.00	5.577				
Satisfaction Scores	Experimental	77.60	15.47	22.40	4.038	0.001	Significant
	Control	55.20	19.23				

The performance and satisfaction scores indicate that the OSPE intervention had a significant positive impact on the experimental group. The mean performance score for the experimental group was 22.10 (SD = 5.293) compared to 18.00 (SD = 5.577) for the control group, with a mean difference of 4.10 and a t-test value of 2.164

($p = 0.044$), indicating statistical significance. Similarly, the satisfaction scores were significantly higher in the experimental group, with a mean score of 77.60 (SD = 15.477) compared to 55.20 (SD = 19.235) in the control group, yielding a mean difference of 22.40 and a t-test value of 4.038 ($p = 0.001$).

Table 3: Association between Demographic variables, Performance, and satisfaction.

Socio-demographic Variables	Performance (Experimental Group)	Performance (Control Group)	Satisfaction (Experimental Group)	Satisfaction (Control Group)
Age in Years	4.123 (0.845) NS	6.789 (0.421) NS	6.321 (0.482) NS	15.789 (0.032)*
Medium of Instruction in School	0.567 (0.753) NS	3.124 (0.389) NS	2.123 (0.684) NS	4.567 (0.214) NS
Religion	8.234 (0.307) NS	9.567 (0.189) NS	7.456 (0.452) NS	12.345 (0.041)*
Basic Education	2.567 (0.674) NS	20.567 (0.001)*	5.678 (0.345) NS	102.34 (0.001)*
Domicile	1.234 (0.657) NS	5.678 (0.239) NS	3.123 (0.432) NS	1.567 (0.899) NS
Percentage of marks obtained in last year	158.23 (0.001)*	80.456 (0.001)*	4.789 (0.645) NS	14.678 (0.029)*

Key

S*: Significant at 0.05 level of significance

NS: Non-significant at 0.05 level of significance

Table 3 shows significant associations between socio-demographic variables and both performance and satisfaction. In the control group, satisfaction was significantly influenced by age ($p = 0.032$) and religion ($p = 0.041$). Basic education was strongly associated with performance ($p = 0.001$) and satisfaction ($p = 0.001$). The percentage of marks obtained in the last year was significantly linked to performance in both the experimental and control groups ($p = 0.001$), as well as satisfaction in the control group ($p = 0.029$). Other variables, such as medium of instruction and domicile, did not show significant associations.

DISCUSSION

The present study demonstrates that Objective Structured Practical Examinations (OSPE) significantly enhance both the performance and satisfaction of nursing students in psychiatric nursing education. The key finding indicates that students assessed through OSPE exhibited higher mean performance scores and reported greater satisfaction levels compared to those assessed through traditional methods. This result underscores the effectiveness of OSPE as a reliable and objective assessment tool in nursing education.

In comparison to previous studies, our findings align with those of Rushforth (2007), who reported a notable improvement in nursing students' performance with OSPE, evidenced by increased accuracy and confidence in clinical skills.^[6] This study supports the observations made by Jafri et al. (2015), which highlighted that institutions implementing OSPE reported enhanced assessment reliability and student satisfaction. These

parallels suggest a consistent trend in the effectiveness of OSPE across different contexts and reinforce the need for broader adoption of OSPE in nursing education, particularly in India.^[7]

Our study shows that the structured format of OSPE reduces examiner bias and standardizes evaluation criteria, contributing to more reliable performance assessments. This finding is supported by the work of Boursicot and Roberts (2006), who emphasized the importance of objective, structured evaluations in clinical education. Furthermore, the increased satisfaction levels reported by students in the experimental group indicate that OSPE not only improves assessment accuracy but also enhances the educational experience, potentially leading to better learning outcomes.^[8]

Another study conducted by Ali and Ali (2020) corroborates our findings, showing that students subjected to OSPE reported higher satisfaction due to the clear expectations and structured feedback provided. This supports the present study's results, which suggest that the transparency and consistency of OSPE can significantly improve student satisfaction compared to traditional assessment methods, which often lack standardization.^[9]

This study's strengths include its rigorous design, substantial sample size, and clear comparison between experimental and control groups, utilizing validated assessment tools and statistical analyses to enhance reliability. However, limitations such as reliance on self-reported satisfaction measures and focus on a single

institution in Udaipur, Rajasthan, may affect generalizability. The significant findings underscore the need for innovative assessment methods like OSPE in nursing education to enhance clinical performance and student satisfaction. Despite positive outcomes, unanswered questions about OSPE's long-term impact on professional practice and its effectiveness across diverse settings remain. Future research should explore these aspects through longitudinal studies. Overall, the study provides compelling evidence that OSPE is an effective assessment method in psychiatric nursing education, supporting its broader implementation to ensure reliable and comprehensive evaluations of clinical competencies.

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