



Perceptions, Perceived Efficacy, and Factors Influencing the Objective Structured Clinical Examination Among Nursing Students at the University of Ibadan

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Abstract

Background: The Objective Structured Clinical Examination (OSCE) has been widely adopted in health professions education because of its objectivity, standardisation, and structured approach to assessing clinical competence. Despite its widespread use, limited evidence exists regarding nursing students' perceptions of the OSCE, its perceived efficacy, and the factors influencing their performance. **Aim:** To assess nursing students' perceptions, perceived efficacy, and factors influencing performance in the Objective Structured Clinical Examination.



Method: A cross-sectional descriptive study was conducted among 135 nursing students in 300–500 levels who had prior OSCE experience at the University of Ibadan. Participants were selected using stratified random sampling. Data were collected using a structured, self-administered questionnaire adapted from validated instruments and administered through Google Forms. The questionnaire assessed respondents' demographic characteristics, perceptions of the OSCE, perceived efficacy, and factors influencing performance. Data were analysed using descriptive statistics (frequencies, percentages, means, and standard deviations) and Fisher's exact test at a 5% level of significance ($\alpha = .05$).

Findings: The respondents had a mean age of 22.96 ± 1.86 years, and the majority were female (83.7%). Most respondents perceived the OSCE as a fair method of assessment (65.9%). Participants reported that the OSCE effectively assessed a broad range of clinical skills (73.3%) and aligned well with taught course content (69.6%). Major factors influencing performance included examiner behaviour (73.3%), examination anxiety (94.8%), inadequate time allocation (82.2%), and improvised equipment (83.0%). Time allocation ($p = .037$) and content load ($p = .028$) were significantly associated with students' perceptions of OSCE performance.

Conclusion: The OSCE is perceived as an effective and objective method for assessing clinical competence among nursing students. However, inadequate time allocation, unfavourable examiner behaviour, examination anxiety, and insufficient resources may adversely affect students' performance and the overall effectiveness of the examination.

Recommendation: Nursing education institutions should strengthen examiner training, ensure adequate availability of standard equipment and materials, optimise time allocation for OSCE stations, and review checklist structures to improve assessment quality, enhance students' performance, and promote clinical competence.

Keywords: Objective Structured Clinical Examination (OSCE), clinical competence, efficacy, influencing factors, nursing students, perception.

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Background to the Study

The Objective Structured Clinical Examination (OSCE) has become one of the most widely accepted methods of assessing clinical competence in health professions education because of its structured format, standardisation, and objectivity (Zayyan, 2011; Khan et al., 2013). Unlike traditional clinical examinations, which are often criticized for subjectivity and inconsistent assessment standards, the OSCE employs standardized patients or scenarios, structured examination stations, predefined checklists, and fixed time allocations to ensure a more objective and reliable evaluation of students' clinical knowledge, psychomotor skills, communication, and professional attitudes (Khan et al., 2013; Patrício et al., 2013).

Originally developed for medical education, the OSCE has been extensively adopted in medicine, nursing, and other health professions to assess clinical competence and enhance the quality of healthcare training (Abubakar et al., 2010; Malu & Osahon, 2014). The examination has been in use internationally for more than five decades (Dewan et al., 2024) and has increasingly gained acceptance in Nigerian health professions education. Evidence indicates that approximately 68% of Nigerian medical schools, including nursing programmes, utilise the OSCE as part of their clinical assessment strategies (Okoye et al.,

2017).

Existing literature consistently demonstrates that students generally perceive the OSCE as a fair, objective, and effective method of clinical assessment. Positive perceptions have been attributed to its structured organisation, logical sequence, standardized scoring system, and ability to evaluate a broad range of clinical competencies (Alaskar et al., 2022). Similarly, previous studies reported that students regarded the OSCE as an impartial assessment method capable of assessing broader clinical knowledge, practical competence, and professional skills more effectively than many traditional assessment methods (Jawaid et al., 2014). Furthermore, approximately two-thirds of students considered the OSCE to be a reliable and valid measure of their clinical competence (Jawaid et al., 2014).

Beyond students' perceptions, several studies have demonstrated the educational benefits of the OSCE. Nursing students have reported greater satisfaction with the OSCE than with Traditional Evaluation Methods (TEM), citing its usefulness in improving clinical practice and promoting meaningful feedback from examiners and peers (García-Mayor et al., 2021; Jelly & Sharma, 2017; Kattil et al., 2022; Nasir et al., 2014). Students have also reported preparing more thoroughly for OSCEs than for conventional examinations (Brand & Schoonheim-Klein, 2009), while higher



clinical performance has been observed among students assessed through OSCEs compared with those evaluated using Traditional Clinical Examination (TCE) methods (Nafee et al., 2019). However, evidence regarding the superiority of the OSCE over written examinations remains inconclusive, as relatively low correlations have been reported between written examination scores and OSCE performance (Chang et al., 2023).

Despite these advantages, students' performance during the OSCE is influenced by multiple individual and institutional factors. Individual factors include students' level of preparation, previous OSCE experience, peer-assisted learning, self-confidence, anxiety, and personal readiness. Institutional factors include inadequate educational resources, high examination costs, increased preparation demands, limited manpower, inadequate examiner training, poorly developed assessment checklists, insufficient examination space, lack of standardized simulated patients, organisational deficiencies, examiner fatigue, and inadequate time allocation for examination stations (Ataro et al., 2020; Dewan et al., 2024; Shafiayan & Moghaddam, 2024). These factors may substantially influence students' perceptions of the examination and their overall performance.

Although numerous studies have evaluated students' perceptions and experiences

of the OSCE in different healthcare disciplines, findings remain inconsistent across educational settings because of differences in curricula, institutional resources, assessment practices, and cultural contexts. In Nigeria, evidence focusing specifically on nursing students remains relatively limited, particularly regarding the combined assessment of students' perceptions, perceived efficacy, and factors influencing OSCE performance. Given the diversity of nursing education across Nigerian institutions, there is a need for context-specific evidence to inform improvements in clinical assessment practices. Therefore, this study assessed the perceptions, perceived efficacy, and factors influencing the Objective Structured Clinical Examination among nursing students at the University of Ibadan, Oyo State, Nigeria.

Aim and Objectives of the Study

Aim

To assess the perceptions, perceived efficacy, and factors influencing the Objective Structured Clinical Examination (OSCE) among nursing students at the University of Ibadan, Nigeria.

Objectives

The specific objectives of the study were to:

1. assess nursing students' perceptions of the Objective Structured Clinical Examination (OSCE);
2. determine nursing students' perceived efficacy of the Objective Structured



Clinical Examination;

3. identify the factors influencing nursing students' performance in the Objective Structured Clinical Examination; and
4. examine the association between previous failure of a clinical course and factors influencing students' performance in the Objective Structured Clinical Examination.

Research Hypothesis

H₀: There is no statistically significant association between previous failure of a clinical course and the factors influencing nursing students' performance in the Objective Structured Clinical Examination (OSCE).

Method

Study Design

This study employed a cross-sectional quantitative research design to assess nursing students' perceptions, perceived efficacy, and factors influencing performance in the Objective Structured Clinical Examination (OSCE). Data were collected between April and July 2024 among undergraduate nursing students at the University of Ibadan, Nigeria.

Study Setting

The study was conducted in the

Department of Nursing, University of Ibadan, Nigeria, in 2024. The University of Ibadan was purposively selected because it is one of Nigeria's oldest federal universities offering undergraduate nursing education and routinely utilizes the Objective Structured Clinical Examination (OSCE) for both university and professional clinical examinations. As a federal institution, it admits students from different regions of the country, making it an appropriate setting for the study. Furthermore, the institution served as Nigeria's study site for the AFREhealth Small Grants Cohort II collaborative research project, with one participating institution selected from each participating country.

Study Population

The study population comprised undergraduate nursing students in 300, 400, and 500-level who had previously participated in at least one Objective Structured Clinical Examination.

Sample Size and Sampling Technique

The sample size was determined using the Krejcie and Morgan (1970) sample size determination formula. From a target population of 141 eligible students, the minimum required sample size was 103 participants. To compensate for possible non-response and incomplete questionnaires, a 30% adjustment was applied, resulting in a final sample size of



135 participants. A stratified random sampling technique was employed. Eligible students were first stratified according to their level of study (300-, 400-, and 500-level), after which participants were selected proportionately from each stratum using simple random sampling.

Eligibility Criteria

Participants were eligible if they:

- were undergraduate nursing students in 300-, 400-, or 500-level;
- had participated in at least one Objective Structured Clinical Examination (OSCE); and
- provided informed consent to participate in the study.

Data Collection Instrument and Procedure

Data were collected over a 10-week period using a structured self-administered questionnaire adapted from the validated instrument developed by Fisseha and Desalegn (2021). The questionnaire consisted of sections on respondents' demographic and academic characteristics, perceptions of the OSCE, perceived efficacy of the OSCE, students' performance, and factors influencing OSCE performance. Most perception items were measured using a 5-point Likert scale ranging from 0 (No response) to 3 (Agree), while other items used response categories appropriate

to the variables being measured, including *Neutral*, *Not at all*, and *To a great extent*. The questionnaire was converted into a Google Form and distributed through the students' class WhatsApp groups to facilitate accessibility and improve response rates. Participation was voluntary, and informed consent was obtained electronically before questionnaire completion.

Data Analysis

Completed questionnaires were downloaded from Google Forms into Microsoft Excel, where the data were cleaned before being exported to IBM SPSS Statistics version 26 for analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarise the data. Fisher's exact test was used to determine the association between categorical variables. Statistical significance was set at $p < .05$.

Ethical Considerations

Ethical approval for the study was obtained from the University of Ibadan/University College Hospital Research Ethics Committee (Approval No. UI/EC/23/0756; NHREC Registration No. NHREC/05/01/2008a). Permission to conduct the study was obtained from the Head of the Department of Nursing and other relevant institutional authorities. Participation was voluntary, informed consent was obtained from all participants, and respondents' anonymity and



confidentiality were maintained throughout the study. All ethical principles governing research

involving human participants were strictly observed.

Findings

Socio-demographic Characteristics of Respondents

Table 1. Socio-demographic Characteristics of Respondents (N = 135)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Female	113	83.7
	Male	22	16.3
Age*	Below mean age	85	64.9
	Above mean age	46	35.1
	Mean age (years)	22.96 ± 1.86	
Religion	Christianity	103	76.3
	Islam	30	22.2
	None	2	1.5
Mode of Entry	Direct Entry	8	5.9
	Transfer	1	0.7
	Transfer from Physiology	2	1.5
	UTME	124	91.9
Level of Study	300 Level	49	36.3
	400 Level	48	35.6
	500 Level	38	28.1

*Age was reported by 131 respondents.

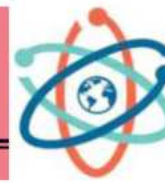


Table 1 presents the socio-demographic characteristics of the respondents. Of the 135 nursing students who participated in the study, the majority were female (83.7%), while 16.3% were male. Age information was available for 131 respondents, with a mean age of 22.96 ± 1.86 years. Among those who reported their age, 64.9% were below the mean age, while 35.1% were above the mean. Most respondents identified as Christians (76.3%), followed by Muslims (22.2%), whereas 1.5% reported

having no religious affiliation. Regarding admission pathway, the overwhelming majority (91.9%) gained admission through the Unified Tertiary Matriculation Examination (UTME), with relatively few admitted through Direct Entry (5.9%), transfer (0.7%), or transfer from Physiology (1.5%). Respondents were drawn from all clinical levels of study, with 36.3% in 300 Level, 35.6% in 400 Level, and 28.1% in 500 Level.

Table 2. Perceptions of Respondents Towards the Objective Structured Clinical Examination (OSCE) (N = 135)

Perception Item	Agree n (%)	Disagree n (%)	Neutral n (%)	No Response n (%)
OSCE examinations are fair	89 (65.9)	17 (12.6)	29 (21.5)	0 (0.0)
A wide knowledge area is covered	89 (65.9)	27 (20.0)	19 (14.1)	0 (0.0)
More time is needed at each station	104 (77.0)	17 (12.6)	14 (10.4)	0 (0.0)
The examination is well administered	68 (50.4)	31 (23.0)	36 (26.7)	0 (0.0)
The examination is very stressful	74 (54.8)	31 (23.0)	29 (21.5)	1 (0.7)
The examination is well organised and sequenced	84 (62.2)	24 (17.8)	26 (19.3)	1 (0.7)
The examination minimises the chance of failing	66 (48.9)	35 (25.9)	34 (25.2)	0 (0.0)
OSCE is less stressful than other examinations	48 (35.6)	63 (46.7)	24 (17.8)	0 (0.0)
The OSCE allows students to compensate for weaker areas	91 (67.4)	24 (17.8)	20 (14.8)	0 (0.0)
The OSCE highlights areas of weakness	102 (75.6)	21 (15.6)	11 (8.1)	1 (0.7)
The examination is intimidating	74 (54.8)	37 (27.4)	24 (17.8)	0 (0.0)



Students are aware of the level of knowledge required	93 (68.9)	16 (11.9)	25 (18.5)	1 (0.7)
The OSCE covers a wide range of clinical skills	99 (73.3)	17 (12.6)	18 (13.3)	1 (0.7)

Table 2 presents respondents' perceptions of the Objective Structured Clinical Examination (OSCE). Overall, the findings indicate that respondents had a generally positive perception of the OSCE. Approximately two-thirds (65.9%) agreed that the OSCE is a fair method of assessment and that it covers a wide knowledge area. More than half (50.4%) perceived the examination to be well administered, while 62.2% agreed that it was well organised and sequentially structured. Most respondents (73.3%) agreed that the OSCE assesses a wide range of clinical skills, and 75.6% reported that it effectively identifies areas of weakness in students' clinical competence. Furthermore, 68.9% indicated

that the examination clearly communicates the level of knowledge expected of students, while 67.4% believed that it provides opportunities to compensate for weaker areas of performance. Despite these positive perceptions, several concerns were identified. The majority of respondents (77.0%) believed that more time should be allocated to each examination station, 54.8% considered the OSCE to be very stressful, and an equal proportion (54.8%) perceived the examination as intimidating. In addition, 46.7% disagreed that the OSCE is less stressful than other forms of examination, suggesting that students generally perceive the OSCE as a relatively stressful assessment method.

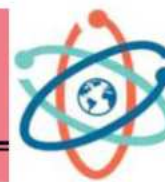


Table 3. Students' Perceived Efficacy of the Objective Structured Clinical Examination (OSCE) Compared with Other Assessment Methods (N = 135)

Variable	Neutral n (%)	Not at all n (%)	To a Great Extent n (%)
OSCE examination scores provide a more accurate measure of essential clinical skills than logbooks or long-case examinations	32 (23.7)	27 (20.0)	76 (56.3)
OSCE scores are more standardized than those obtained using other assessment methods	36 (26.7)	13 (9.6)	86 (63.7)
The OSCE provides practical and useful learning experiences	19 (14.1)	11 (8.1)	105 (77.8)
Personality, ethnicity, and gender do not influence OSCE scores	19 (14.1)	31 (23.0)	85 (63.0)
Participating in the OSCE presents more challenges than other assessment methods	40 (29.6)	35 (25.9)	60 (44.4)

Table 3 presents respondents' perceived efficacy of the Objective Structured Clinical Examination (OSCE) compared with other assessment methods. More than half of the respondents (56.3%) believed that OSCE scores provide a more accurate measure of essential clinical skills than logbooks or traditional long-case examinations. Nearly two-thirds (63.7%) perceived OSCE scores to be more standardized than those obtained through other assessment methods. The majority of respondents (77.8%)

agreed that the OSCE provides practical and useful learning experiences, while 63.0% believed that students' personality, ethnicity, and gender do not influence OSCE scores, suggesting that the examination is perceived as objective and impartial. However, 44.4% reported that participating in the OSCE is more challenging than other assessment methods, indicating that although students recognise its educational value, they also perceive it as demanding.



Table 4. Students' Perceived Efficacy of the Objective Structured Clinical Examination (OSCE) (N = 135)

Variable	Neutral n (%)	Not at all n (%)	To a Great Extent n (%)
Students were fully aware of the nature of the examination	10 (7.4)	13 (9.6)	112 (83.0)
Examination tasks reflected what was taught	32 (23.7)	9 (6.7)	94 (69.6)
Time allocated at each station was adequate	30 (22.2)	77 (57.0)	28 (20.7)
The setting and context of each station were authentic	45 (33.3)	33 (24.4)	57 (42.2)
Instructions were clear and unambiguous	21 (15.6)	16 (11.9)	98 (72.6)
Tasks students were asked to perform were fair	21 (15.6)	14 (10.4)	100 (74.1)
The sequence of stations was logical and appropriate	28 (20.7)	17 (12.6)	90 (66.7)
The examination provided opportunities for learning	23 (17.0)	24 (17.8)	88 (65.2)

Table 4 presents respondents' perceptions of the efficacy of the Objective Structured Clinical Examination (OSCE). The majority of respondents (83.0%) reported being fully aware of the nature of the examination before participating. Similarly, 69.6% indicated that the examination tasks reflected the content taught during their training, while 72.6% agreed that the examination instructions were clear and unambiguous. Most respondents also perceived the examination tasks to be fair (74.1%), reported that the sequence of stations was logical and appropriate (66.7%), and believed that the OSCE provided valuable opportunities

for learning (65.2%). Additionally, 42.2% agreed that the examination stations simulated authentic clinical settings. However, a notable concern was the adequacy of time allocated to each examination station. More than half of the respondents (57.0%) indicated that the time provided was not adequate, suggesting that insufficient time remains a major challenge affecting students' experiences during the OSCE.



Table 5. Respondents' History of Clinical Examination Failure (N = 135)

Variable	Frequency (n)	Percentage (%)
<i>Ever failed a clinical examination during the clinical years</i>		
No	127	94.1
Yes	8	5.9
<i>Mode of examination for the failed paper (n = 8)</i>		
Long-case examination	4	50.0
OSCE	2	25.0
Short-case examination	1	12.5
Combination of assessment methods	1	12.5
<i>Type of failed examination (n = 8)</i>		
OSCE	2	25.0
Other examinations	6	75.0

Table 5 presents respondents' history of clinical examination failure. The majority of respondents (94.1%) reported that they had never failed a clinical examination during their clinical years, while only 5.9% indicated having failed at least one clinical examination. Among the eight respondents who had experienced examination failure, 50.0% reported failing

a long-case examination, 25.0% failed an OSCE, while 12.5% each failed a short-case examination or an examination that involved a combination of assessment methods. Overall, only 25.0% of respondents who had previously failed a clinical examination reported failing an OSCE, whereas 75.0% failed other forms of clinical assessment

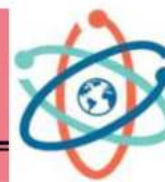


Table 6. Factors Influencing Nursing Students' Performance in the Objective Structured Clinical Examination (OSCE) (N = 135)

Variable	Neutral n (%)	Not at all n (%)	To a Great Extent n (%)
Time allocated for each examination station	16 (11.9)	8 (5.9)	111 (82.2)
Content load	19 (14.1)	13 (9.6)	103 (76.3)
Examiners' behaviour during the OSCE	21 (15.6)	15 (11.1)	99 (73.3)
Examination anxiety	3 (2.2)	4 (3.0)	128 (94.8)
Late notification of the OSCE	23 (17.0)	68 (50.4)	44 (32.6)
Ambiguous examination scenarios	17 (12.6)	43 (31.9)	75 (55.6)
Poor self-preparation for the OSCE	17 (12.6)	16 (11.9)	102 (75.6)
Improvised equipment	13 (9.6)	10 (7.4)	112 (83.0)

Table 6 presents the factors perceived by respondents to influence their performance in the Objective Structured Clinical Examination (OSCE). The most frequently reported influencing factor was examination anxiety, with 94.8% of respondents indicating that it influenced their performance to a great extent. Other prominent factors included improvised equipment (83.0%), time allocated for each examination station (82.2%), content load (76.3%), poor self-preparation (75.6%), and examiners' behaviour (73.3%). More than half

of the respondents (55.6%) also reported that ambiguous examination scenarios influenced their performance to a great extent. In contrast, only 32.6% considered late notification of the OSCE to be a major influencing factor, while 50.4% indicated that it did not influence their performance. Overall, the findings suggest that both student-related factors (such as anxiety and preparation) and examination-related factors (such as timing, examiner behaviour, equipment, and content load) contribute substantially to students' performance during the OSCE.

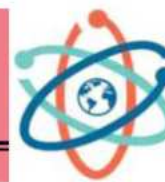


Table 7. Association Between Previous Failure of a Clinical Examination and Factors Influencing Students' Performance in the Objective Structured Clinical Examination (OSCE)

Variable	Never Failed n=127 n (%)	Previously Failed n=8 n (%)	Fisher's Exact Test	p-value
<i>Time allocated for each examination station</i>				
Neutral	13 (81.3)	3 (18.8)		
Not at all	7 (87.5)	1 (12.5)		
To a great extent	107 (96.4)	4 (3.6)	6.269	.037*
<i>Content load</i>				
Neutral	15 (78.9)	4 (21.1)		
Not at all	13 (100.0)	0 (0.0)		
To a great extent	99 (96.1)	4 (3.9)	6.583	.028*
<i>Examiners' behaviour</i>				
Neutral	19 (90.5)	2 (9.5)		
Not at all	13 (86.7)	2 (13.3)		
To a great extent	95 (96.0)	4 (4.0)	3.224	.146
<i>Examination anxiety</i>				
Neutral	3 (100.0)	0 (0.0)		
Not at all	4 (100.0)	0 (0.0)		
To a great extent	120 (93.8)	8 (6.3)	0.542	1.00
<i>Late notification of the OSCE</i>				
Neutral	22 (95.7)	1 (4.3)		
Not at all	64 (94.1)	4 (5.9)		
To a great extent	41 (93.2)	3 (6.8)	.243	1.00
<i>Ambiguous examination scenarios</i>				
Neutral	16 (94.1)	1 (5.9)		
Not at all	42 (97.7)	1 (2.3)		



To a great extent	69 (92.0)	6 (8.0)	1.514	.452
<i>Poor self-preparation for the OSCE</i>				
Neutral	16 (94.1)	1 (5.9)		
Not at all	14 (87.5)	2 (12.5)		
To a great extent	97 (95.1)	5 (4.9)	1.908	.296
<i>Improvised equipment</i>				
Neutral	11 (84.6)	2 (15.4)		
Not at all	10 (100.0)	0 (0.0)		
To a great extent	106 (94.6)	6 (5.4)	2.365	.269

* Significant at $\alpha = .05$

Table 7 presents the association between respondents' history of previous clinical examination failure and factors influencing performance in the Objective Structured Clinical Examination (OSCE). Fisher's exact test demonstrated statistically significant associations between previous examination failure and time allocated for each examination station ($p = .037$) as well as content load ($p = .028$). These findings suggest that students who had previously failed a clinical examination differed significantly in their perceptions of the influence of time allocation and examination content load on OSCE performance. No statistically significant associations were observed between previous examination failure and other factors, including examiners' behaviour ($p = .146$), examination anxiety ($p = 1.00$), late notification of the OSCE ($p = 1.00$),

ambiguous examination scenarios ($p = .452$), poor self-preparation ($p = .296$), or improvised equipment ($p = .269$).

Discussion

This study examined nursing students' perceptions, perceived efficacy, and factors influencing performance in the Objective Structured Clinical Examination (OSCE) at the University of Ibadan. The findings provide evidence that nursing students generally hold positive perceptions of the OSCE and consider it an effective method of assessing clinical competence despite several factors that adversely influence their performance. The sociodemographic findings showed that female students constituted the majority of the respondents. This finding is consistent with the report of Sengul et al. (2024), who similarly found that female students predominated among



health sciences students participating in OSCE evaluations. The predominance of females reflects the traditional gender composition of the nursing profession, where women have historically constituted the larger proportion of the workforce because of longstanding societal and professional perceptions of nursing as a caring and nurturing profession (Prosen, 2022; Pang et al., 2023).

Although the respondents had spent more than three years in the nursing programme and had substantial exposure to clinical training, examination anxiety remained one of the strongest factors influencing performance. This finding indicates that familiarity with the OSCE does not necessarily eliminate examination-related anxiety. In contrast, John et al. (2020) reported that anxiety was particularly pronounced among first-year students because of uncertainty about the examination process, unfamiliarity with examiners, and fear of poor performance. The present findings suggest that examination anxiety persists even among senior nursing students, highlighting the need for interventions that address psychological preparedness in addition to clinical competence. Students generally demonstrated positive perceptions of the OSCE. Most respondents regarded the examination as fair, well organised, and capable of assessing a broad range of clinical knowledge and practical skills. These findings are consistent with previous studies

that reported favourable student perceptions of the OSCE as an objective, comprehensive, and credible assessment method (Jawaid et al., 2014; Sankarapandian et al., 2026). Similarly, Fisseha and Desalegn (2021) reported that students considered the OSCE to be well structured and appropriately administered, although additional time at examination stations was frequently recommended. Positive perceptions of the fairness and comprehensiveness of the OSCE reinforce its value as a reliable strategy for evaluating clinical competence among nursing students.

The findings further demonstrated that students perceived the OSCE to be more effective than many traditional clinical assessment methods. Respondents reported that examination tasks reflected what had been taught during clinical instruction, instructions were clear, station sequences were logical, and the examination promoted meaningful learning experiences. These findings agree with those of John et al. (2021), Peng et al. (2025), and Sediq et al. (2023), who observed that students generally rated the clarity of examination instructions, authenticity of scenarios, organisation of stations, and alignment between teaching and assessment positively. The findings also support previous reports that the OSCE enhances students' confidence, critical thinking, psychomotor competence, and ability to identify learning needs (John et al., 2020). Collectively,

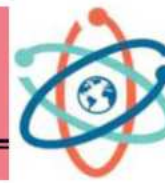


these findings provide additional evidence supporting the educational value of the OSCE in nursing education. Nevertheless, despite these positive perceptions, several factors were identified as significant influences on students' performance. Examination anxiety was the most frequently reported factor, followed by improvised equipment, inadequate time allocated for each examination station, content load, poor self-preparation, and examiners' behaviour. These findings are consistent with previous studies demonstrating that anxiety (Martin & Naziruddin, 2020), inadequate preparation (Ataro et al., 2020), insufficient station time (Shafiayan & Moghaddam, 2024), examiner-related factors, communication skills, and clinical competence (Ding & Matt, 2025) significantly affect students' OSCE performance. Similarly, John et al. (2021) and Fisseha and Desalegn (2021) reported that students frequently identified inadequate time, stressful examination conditions, and limited realism of clinical scenarios as barriers to optimal performance. These findings underscore that students' OSCE performance is determined not only by their knowledge and clinical skills but also by examination design and implementation.

Inferential analysis revealed statistically significant associations between previous failure of a clinical examination and two factors influencing OSCE performance: time allocated

for each examination station and content load. Students with a history of previous clinical examination failure differed significantly in their perceptions of these two factors, whereas no significant associations were observed for examination anxiety, examiner behaviour, late notification of the examination, ambiguous scenarios, poor self-preparation, or improvised equipment. These findings partially reject the study's null hypothesis and suggest that the amount of content assessed and the adequacy of time provided at each station may be particularly important considerations for students who have previously experienced examination failure. Consequently, careful attention should be given to station design, content distribution, and time allocation to ensure that examinations accurately assess competence without introducing avoidable performance barriers.

Overall, the findings indicate that the Objective Structured Clinical Examination remains a highly valued and effective method of assessing clinical competence among nursing students. However, maximizing its educational benefits requires continuous attention to examination quality, including adequate station timing, standardized examiner conduct, appropriate equipment, realistic clinical scenarios, and strategies to reduce examination anxiety. Addressing these factors will improve both the validity of the assessment process and students' clinical learning experiences.



Conclusion

This study demonstrated that nursing students at the University of Ibadan generally have positive perceptions of the Objective Structured Clinical Examination (OSCE) and regard it as an effective method of assessing clinical competence. Students perceived the OSCE as fair, comprehensive, well organised, and reflective of the clinical knowledge and skills acquired during training. Despite these positive perceptions, several factors were identified as influencing students' performance, particularly examination anxiety, inadequate time allocated to examination stations, improvised equipment, content load, poor self-preparation, and examiners' behaviour. Furthermore, previous failure of a clinical examination was significantly associated with perceptions of time allocation and content load, highlighting the importance of appropriate examination design and implementation. Overall, the findings affirm the educational value of the OSCE while emphasizing the need to address modifiable examination-related factors to optimise students' performance and strengthen clinical competence.

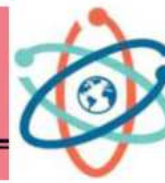
Recommendation

Based on the findings of this study, the following recommendations are made:

1. **Optimise time allocation during the OSCE:** Examination stations should

be allocated sufficient time based on the complexity of the clinical procedure being assessed to enable students to demonstrate their competencies effectively without unnecessary time pressure.

2. **Strengthen students' preparation for the OSCE:** Nursing schools should implement structured orientation programmes, pre-briefing sessions, mock OSCEs, and return demonstrations before the main examination to familiarise students with the examination format, reduce anxiety, and improve confidence and performance.
3. **Provide adequate examination resources:** Institutions should ensure the availability of standard, functional, and adequate equipment and materials required for each OSCE station to enhance the validity, reliability, and standardisation of the examination process.
4. **Enhance examiner training and standardisation:** Examiners should receive regular training and calibration on OSCE principles, assessment criteria, and professional conduct to promote consistency, objectivity, and positive interactions with students during examinations.
5. **Ensure alignment between teaching**



and assessment: Clinical procedures taught during classroom and practical sessions should correspond closely with those assessed during the OSCE to reinforce learning outcomes and ensure fair evaluation of students' clinical competence.

6. **Review OSCE implementation periodically:** Nursing institutions should regularly evaluate and improve OSCE implementation through student feedback, examiner reviews, and periodic quality assurance activities to ensure that the examination remains effective, objective, and responsive to evolving educational needs.

Implication for Nursing

The findings of this study reinforce the value of the Objective Structured Clinical Examination (OSCE) as an effective method for assessing nursing students' clinical competence. Nursing educators and administrators should strengthen OSCE implementation by ensuring adequate time allocation, standardized examiner training, sufficient equipment, and structured student preparation. Addressing these factors will enhance the reliability of clinical assessment, reduce examination-related anxiety, improve students' clinical competence, and ultimately contribute to the preparation of

safe and competent nursing professionals.

Limitation

This study was conducted among nursing students in a single tertiary institution, which may limit the generalizability of the findings to other nursing schools. In addition, the use of self-reported data may have introduced response bias, as participants' responses were based on their personal perceptions and experiences.

Suggestion for Further Studies

Future studies should involve multiple nursing institutions across different regions to improve the generalizability of the findings. Researchers should also investigate interventions such as mock OSCEs, structured orientation programmes, anxiety-reduction strategies, and examiner training to determine their effectiveness in improving students' performance and experiences during the OSCE.

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Conflict of Interest

The authors declare no conflict of interest.

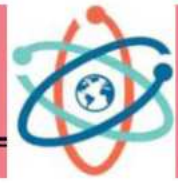


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