



TC
BLACK SEA TECHNICAL UNIVERSITY
HEALTH SCIENCES SCIENTIFIC RESEARCH ETHICS COMMITTEE
APPLICATION FORM

Application Date

10/10/2025

Academic staff and students working at Karadeniz Technical University , directly or electronically, as individuals or legal entities, in the field of health sciences. For scientific research and studies to be conducted with the participation of representatives, using data collection methods such as surveys, tests, scales, interviews, observations, pictures, drawings, video films and audio recordings, it is mandatory to apply to the Karadeniz Technical University Health Sciences Scientific Research Ethics Committee.

A. APPLICATION INFORMATION

1- The application Quality

New Application	X
Revised Done Application	
One Former The project Continued	
Other	

2- If the application is a continuation of a previous project, the work being carried out must not differ from any previously approved work .difference Does it show?

Yes		No	X

3- Responsible The researcher

Title , Name-Surname	
Unit / Section	
phone (Work / Pocket)	
Address	
Email address	
Signature	

4- Other The researcher / Researchers (Row count can be increased if necessary)

No	Title , Name-Surname	Unit / Section	phone (Work / Pocket)	Address	Email address	Signature

INVESTIGATION OF THE EFFECT OF IV PERIPHERAL CATHETERIZATION OSCE APPLICATION ON THE STRESS AND SKILL LEVELS OF NURSING STUDENTS

Each page of the application form must be signed by all researchers (must be a wet signature).

5- (If any) The consultant

Title , Name-Surname	
Unit / Section	
phone (Work / Pocket)	
Address	
Email address	
Signature	

B. RESEARCH/PROJECT**1- Turkish Title of the Project/Research**

IV Peripheral Catheterization OSCE Application Nursing Students Stress and Skills To the level Its effect Examination

2- English Title of the Project/Research

Investigation of the Effect of IV Peripheral Catheterization Osce Application on the Stress and Skill Levels of Nursing Students

3- Project/Research Topic : Health Sciences Field (Suitable The one which The box (Please mark)

Nutrition And Dietetics	
Child Development	
Midwifery	
Physiotherapy and Rehabilitation	
Nursing	X
Health Management	
Other (Please (Please specify)	

4- The research Its purpose

this study IV peripheral catheterization OSCE procedure students stress And skill to the level its effect to examine is intended .

5- The research Subject and Scope

Nursing students clinical application before starting before skill their competencies evaluation big importance It carries . This purpose towards students sufficiency their situations evaluated Lens Structured Clinical Examination (OSCE), today's nursing programs in most of them official One evaluation method aspect acceptance is being done And It is used (Al Khalidi et al., 2022). This evaluation method , each of them different qualifications to evaluate on designed suddenly more from the station is formed And all participants clear One in time at the station skill to do expected . Students skill while observers by is watched And necessary tasks in its place bringing The situations are noted . At each station . One observer is found And to students intervention without And back in the notification without being found observation He does . From the students expected skill

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targets prior to OSCE with students It is shared . To each student . how much at the stations duration will stay and what to do about informed directive is given And explanation It is done . Evaluation criteria And students will receive points previously set standard One chart / process step over It is done (Turan Miral et al ., 2024). Traditional clinical evaluation techniques compared final One evaluation for OSCE's more impartial , effective And Trustworthy One evaluation technique offers (Al Hamed, 2021). However, OSCE students clinical application to reality by preparing clinical their performances while increasing in students stress like situations It can create . Therefore students real their performances is unable to show (Conde and Clemente-Suárez, 2021 ; Hosseini et al ., 2025) .

OSCE's especially corrective action opportunity without directly observation And evaluation under to be done And with this together only one trip , return irreversible in the structure being other evaluation methods compared students stress levels more more is increasing (Alizadeh et al ., 2024; Al Khalidi et al ., 2022) . El- Sharkawy and by Hassan done One in the study nursing Over 86% of students during OSCE serious stress that he/she (El-Sharkawy) shows and Hassan, 2024) . Stress students perform well to show for necessary the one which... mental processes that he ruined showing studies even though (Mojarab) etc. , [2020](#)) little in quantity stress One motivation source task what he saw , his performance increased And student more A lot to work incentive to what he did related in studies (Al -Hamed [2021](#) , Fawaz and Alsalamah , [2021](#)). At this point stress level important is It can be said that students during OSCE -lived is stress with skill levels between the relationship examination important will be It is thought .

In the literature, during OSCE student lived stress level measured study examples It exists . In these studies stress level , essence notification based on scales , saliva from the example cortisol measurement And heart shot speed waves tracking like different methods by using measured (Alhawari) et al., 2023; Bellido-Esteban et al ., 2021; Ferreira et al ., 2020; Hebel et al ., 2025a; Martínez-Pascual et al ., 2022; Sánchez-Conde et al ., 2021) . Some in studies self-report questionnaire results with physically measurement parameter with each other related not And Generally students stress what they reported at heart shot speed or cortisol level significant degree unchanged This has been stated (Ferreira et al ., 2020; Sommerfeldt et al ., 2019; Vaessen et al ., 2021) . OSCE simulation together application real OSCE stress reduced And skill performance results positive affected related evidence present studies in the literature available (Behrendt et al., 2019; Foladovandi (et al., 2024). Reached other experimental OSCE experience in studies number stress on it effect (Hebel et al ., 2025) and different content owner OSCE scenarios in students created stress level (Bellido-Esteban et al ., 2021) topics examined It is seen . All This studies big One in part measurement vehicle aspect students self notification based on surveys used It has been determined . However in studies especially stress in measurement lens measurement methods usage , practical measurements to be done And randomized controlled trials aspect strong literature on planning evidence present in terms of effective will be It is thought so . At this point stress in measurement non-invasive aspect physiological parameters measurement providing And momentary notification giving And nowadays technology with prepared clever bracelets This requirement can meet . In this context planned In the study , students stress level self notification surveys And clever hours with together by measuring They will be compared

All This known in the light of in the study , The study as a result in hand done findings to the literature contribution will provide It is thought .

Sources

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6- **Method** (*Write this section considering the following headings*)

This study is a randomized controlled trial . And experimental of the type will be done .

The research will be carried out Location : Research Center , Black Sea Technical University Health Sciences Faculty It will be conducted in the Nursing Department .

The research time (Beginning) And finish (dates): Research December 2025 - September 2026 between will be done .

The research universe And Sample : The research its universe in the spring semester of 2025-2026 nursing section first to the class record 160 students had it done It constitutes its sample . whereas research genius done criteria wake up And to work to participate acceptance 64 students will create . Sample width by Yalçın et al. (2024) made to work according to OSCE during students the ones they lived stress levels average values via G*power 3.1.9.4 program with It has been determined . As a result of the analysis. According to 95% power , 0.05 significance . situation and 0.91 effect width with a minimum of 52 students reaching as needed It has been determined (Yalçın et al ., 2024). In our study casualties possible by thinking to work 10% more than the sample 64 students to be taken It is planned .

Participants vote Method : Research participation criteria welcoming And research to participate acceptance eden all students (64 students) experiment or control from the group to someone block randomization method by using will be assigned . Students block randomization method in line with ; information test to their scores according to experiment And control to their groups will leave .

To the research including done criteria : Students Nursing First time in the Fundamentals II Course record He had it done , for the first time to the OSCE. will experience being And research to participate voluntarily That is the case .

To the research including not being done criteria : Students health job high school graduate or health with relating to One section read being , more previously basis nursing to your skills related any One experience owner being lesson in the scope of performed lab to their studies not participating And students tests missing is filling

Data collection vehicles (Validity-reliability) studies in the scope of to be used vehicles for necessary permissions (must be presented) :

The research data " Student Introductory "Specification Form", " *IV Catheter*" *Application Knowledge Test* ", "IV Catheter Application Skill Control List ", " Contextual" Anxiety Inventory " and " **Huawei Watch Fit 2 (smart clock)** " with will be collected .

Student Introductory Features In *the form* student age , gender And nursing his profession willingly preference do not situation.with relating to A total of 3 questions It is located . This section students by will be filled in (Appendix 1).

IV Catheter Application Knowledge Test current to the literature suitable aspect researchers by (Akbıyık , 2021; Berman et al ., 2016; Craven et al ., 2013; DeLaune) (Lander, 2011; Lynn, 2015; Potter and Perry, 2017). Tests each one inside question five optional already multiple choice test question aspect prepared and every problem only One TRUE answer There are . From the test can be obtained -most high The score is 20. Knowledge test . Nursing Fundamentals in the field expert five teaching member Experts have evaluated it . received all back notifications in line with lesson in it necessary regulations made and its final form It has been given . After the test was prepared ... later Expert opinion their compatibility with KGI It has been calculated . In the knowledge test . questions from the perspective of KGI sufficient It was found (KGI min. 0.60, max. 1.000). Preliminary application will be taken student number information in the test question The number will be 5 times (20 questions x 5) in this way to 100 students It has been implemented (Karip , 2015). Experts from their opinions later information test front Nursing practice Fundamentals lesson first in the classroom by taking success with complete second class nursing The study was conducted with students (n=100) . The preliminary stage of the test... application after it was done later article difficulty index And distinguish efficacy The indices have been tested . IV medication. The test results were KR20=0.77, KR21=0.70, and Chronbach alpha=0.77. found (Appendix 2).

IV Catheter Application Skill Control List to the literature suitable aspect researchers by prepared by (Berman et al ., 2016; Craven et al ., 2013; DeLaune (Lander, 2006; Potter and Perry, 2016; Taylor et al ., 2011). Skill IV. control list A total of 27 transactions . from the step It consists of . The process steps " correct" did " (1 point) or " did not / wrong" did it " (0 points) has been evaluated (Appendix 3).

Contingency Anxiety Inventory Charles D. Spielberger and friends by It has been developed . State-Continuous Anxiety The state subscale of the State-Trait Anxiety Inventory (STAI) expression It does . This subscale individuals clear One at what they felt anxiety level measuring Objectives . The scale original form 20 items is formed and each item is rated using a 4- level Likert scale (e.g., " none ", " somewhat ", " quite ", " very "). It is scored . On the scale some substances opposite in the opposite direction These are the items that are scored ; substances scores opposite translated total score including It is done . Reversed . scored Items : Reverse scored The items are : 1, 2, 5, 8, 10, 11, 15, 16, 19, and 20 . Scale scores theoretical between 20 and 80 It changes ; score as it rises the individual at that

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moment anxiety level more high is comment It is done . The scale drink consistency the coefficient (Cronbach's alpha) is between 0.86 and 0.95. It is changing . Into Turkish adaptation by Öner and LeCompte (1985) made and the Cronbach alpha value in the Turkish sample was 0.83–0.87. It has been found . Nursing students on done current in studies whereas This value It is generally in the range of 0.89–0.94 (Kaya & Şimşek, 2021; Aydın & Kızılkaya, 2019). The scale in its interpretation , the individual in hand he total point other individuals with their scores compared ; general groups for averages And distributions eyelash in front by categorizing anxiety as " low ", " medium ", or " high ". level categories can be determined (Appendix 4).

Smartwatch with in the study momentary physiological stress level will be measured . Smart measurement . for from the wrist optical pulse sensor (HUAWEI TruSeen™ 5.0) and HRV (heart rate) shot variability) based **HUAWEI TruRelax™** algorithm user **Huawei Watch Fit 2** device will be used . This clock algorithm thanks to **low level stress (1–29), normal level stress (30–59), moderate level stress (60–79) and high level stress (80–99)** results on the researcher's cell phone found mobile application It transmits .

Data collection Method : Research data face to face questionnaire And observation methods by using will be collected .

The research Implementation

To the research to participate acceptance eden And research including done criteria wake up to students research purpose about information will be given . Students will work participation about approval after giving then " Student Introductory They will fill out the " Characteristics Form" . To the students intravenous catheter application theoretical section traditional methods with to be told And students lesson finally information test Students will fill it out . block randomization method with , information test to their scores according to experiment And control to their groups will leave . Next day , all students lab to his work will be taken . Teaching element process steps suitable aspect model on demonstration with IV catheter application One times will show And after students, 8 people groups in teaching element with together will work . Every student -most little One times model on application will try . Experiment group students OSCE application will be taken . OSCE students skill application what they did lab in the environment two station will be in a way will be prepared . Students will have an IV catheter inserted at the first station . application do will be requested . Second at the station students lottery with the ones they took One application Students will do it . second at the station desired skill study in the scope of evaluation will not be done . Each one at the station students skill do 5-minute intervals for It will happen . Every 5 minutes . bell will steal And students One from the station to the other It will pass .

Experimental Group

this group students First station at OSCE without entering former stress levels Contingency Anxiety Inventory And clever hour through It will be determined . Immediately afterwards . student IV catheter at the station application while process steps Skill Control List by using teaching element by will be evaluated . The application at the end students stress level Contingency Anxiety Inventory And clever hour through again It will be evaluated .

Control Group

Control in the group Students OSCE application without 5 minutes duration within IV catheter application will do . This application immediately before students stress levels Contingency Anxiety Inventory And clever hour through will be determined . Application during process steps Skill Control List by using teaching element by will be evaluated . The application at the end students stress level Contingency Anxiety Inventory And clever hour through again It will be evaluated .

Ethic aspects

The research can be done for Black Sea Technical University Health Sciences Faculty Institution from the Nursing Department permission (Date:... .. No:... ..) and Health Sciences Scientific Research Ethic From the Board ethic approval will be taken (Date: No:). Application before starting before research within its scope received to students research purpose And research to your plan related information will be given , informed consent form with written consents will be taken .

In the research to be used statistical methods :

From the research in hand done data using SPSS (Statistical Package for Social Sciences) for Windows 25.0 program . by using analysis will be done . The data in the evaluation descriptive statistical methods aspect number (n), percentage (%), median and quartile (Q_1 , Q_3) values will be given . Research normal distribution of variables show that he did not show to determine Kolmogorov - Smirnov test will be implemented . Groups with variables between relationship chi- square (X^2) analysis It has been tested with two independent studies . group between quantitative continually data Student-T or Mann Whitney-U test for comparison will be used . Also variables between relationship to look for correlation analysis will be used . obtained findings with 95% confidence. within the range , 0.05% significance at the level It will be evaluated .

7- The research Type *(Suitable The one which The box (Please mark)*

High Licence Thesis	
Doctorate Thesis	
Individual Research / Project	X
BAP Project	
TÜBİTAK Project	
Institutional Research Project	
Finishing Project	
Other (Please (Please specify)	

8- Support Information

Project for any One support if received ;	
Supporting organisation :	<input type="checkbox"/> University <input type="checkbox"/> TÜBİTAK <input type="checkbox"/> International (please specify)... <input type="checkbox"/> Other (please specify).....

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