Reducing Performance Exam Anxiety: Student-Centered Skills Performance Exams Using Video and Peer-to-Peer Mentoring

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Purpose:

Nursing education has a large and unique skills based component which include high stakes skills such as medication administration and catheter insertion. The process of teaching these various skills requires an integration of theoretical classroom content and "hands-on" skill development with all skills being interdependent on the other for application in the patient care management setting. Prior to performing skills in the hospital, faculty must evaluate the student’s ability to safely perform a skill.

Traditionally, in many schools of nursing, nursing skill performance examinations are conducted in a face-to-face (F2F) meeting where a student performs the skill with the faculty watching and evaluating the performance of the skill. Within this teaching institution, nursing students often expressed and exhibited high levels of stress and anxiety during high stakes skills performance testing.

High levels of test anxiety can prevent students from performing well in traditional F2F exams. This form of testing may also keep students from reaching their academic potential by disrupting focus, attention, and concentration increasing the risk for poor performance test outcomes (Driscoll, 2007; Gibson, 2014; Khalaila, 2015). Performance and other types of exams create high levels of anxiety which can be seen in physical and psychological symptoms such as sweating, palpitations, forgetfulness, fear, and doubt (Gibson, 2014). Some literature suggests nursing students are under significantly higher levels of stress than the average college students’ due to the understanding that their academic success directly impacts the quality of care they give and even the smallest mistake can have dire repercussions for the patient and future careers. Because quality of care and safety are of primary concern, academic progression is especially important in nursing school. Failing high stakes exams can lead to failing the overall program (Gibson, 2014; Driscoll, 2007).

Previous nursing skills course evaluation surveys were analyzed which identified grading interrater reliability, faculty reputation, and faculty grading fatigue as factors contributing to student stress and anxiety. Students expressed concerns that the stressful testing environment contributed to their poor test performance. When critically examining the testing process faculty concurred with many of the students concerns.

To reduce nursing student stress and anxiety a new innovative student-centered approach to performance exam testing was piloted over six academic semesters. The focus of this presentation is the analysis of course evaluation data relating to the student’s stress and anxiety in both the traditional face-to-face and video performance examinations.

Methods:

Developed as a course evaluation, a mixed methods analysis was used to compare the reported stress and anxiety levels of nursing students being tested using both the traditional skills performance exam and the new video performance exam. In addition to collecting quantitative data, additional qualitative questions were asked. Qualitative questions focused on student’s personal perceptions of stress and anxiety as well as general perceptions related to their respective testing methods.
An instrument that included demographics, qualitative questions, and the Westside Test Anxiety Scale was administered pre/post-performance in the 2015 fall semester as a pilot during the Adult Nursing Skills I class. The Westside Test Anxiety Scale (Driscoll, 2007), is a validated ten item student self-assessment instrument used to evaluate nursing student pre-test anxiety. The standardized performance exam used during the evaluation was the Medication Administration exam. Student participation in the test evaluations was voluntary and anonymous.

Findings:

The pilot sample size was 33 nursing students, 21 students took the traditional performance exam and 12 took the performance video exam. Findings in the pilot study found high levels of anxiety among pre-performance exam students. For example, 87% of all students felt they would forget exam information due to anxiety. Post-performance exam survey found high satisfaction from the students testing with the performance video exam. After testing was completed 100% of the pilot student group was satisfied with the video performance exams and reported lower levels of anxiety once they were comfortable with the testing procedure. Results indicated 54% of all students felt they would be comfortable being tested using the video performance exam. When analyzed from a qualitative perspective, the major theme identified for the traditional F2F exam was the negative effects related to the presence of the instructor. There were also positive comments regarding instructors being present but not as numerous. Major themes identified for the video performance exam were “less stressful”, “autonomy”, and “confidence”.

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Keywords: Faculty-free performance testing, Peer-to-peer mentoring and Student-centered testing


Abstract Summary: This presentation introduces an innovative testing method for nursing skills education. Using a mixed-methods approach, six semesters of data using student-centered digital video and peer-to-peer mentoring testing method were analyzed. When using student-centered skills performance exams students had lower levels of test anxiety that with the traditional skills performance exam.

Content Outline:
Introduction:

1. Traditional nursing skills teaching methods are stressful for nursing students and require large amounts of faculty time.
2. Nursing students have high levels of stress and anxiety. The stress state interferes with learning and often induces psychosomatic manifestations such as nausea, vomiting, and overwhelming emotions.

**Body:**

**Main Point #1:** Provides an alternate student-centered approach to the traditional method of nursing skills instruction and evaluation.

Supporting Point #1: Skill performance anxiety inhibits learning by intensifying the stress state the student experiences during the skill performance.

Supporting Point #2: Students are directed to work in a peer group to practice, test, and grade each other performing nursing skills such as medication administration and Urinary catheter placement.

Supporting Point #3: The student-centered approach reduces student performance anxiety by increasing their autonomy and control.

**Main Point #2:** Nursing students independently use the digital video peer-to-peer method to practice and evaluate their nursing skills until they feel confident, competent, and demonstrate no unacceptable deviations from the current evidenced based practice.

Supporting Point #1: Students have a faculty-free testing environment using peer-to-peer mentors. Mentoring engages the students in discussions on performance, identification of errors and improving personal performance.

Supporting Point #2: Students can record skills performances, analyze, then repeat performance correcting mistakes until they perform the skills without deviations from current best practice.

Supporting Point #3: Students are accountable to each other for their grades.

**Main Point #3:** Student centered skills performance exams using digital video and peer-to-peer mentoring provides nursing faculty with tools to improve instruction and student comprehension of a nursing skill.

Supporting Point #1: Allows faculty to analyze student performance and identify areas needing improvement in technique.

Supporting Point #2: Faculty also use student skills performance videos to identify strong student performers who can mentor struggling peer groups.

**Conclusion:**

Student-centered video and peer-to-peer mentoring for nursing skills performance exams is a reliable alternative to traditional high-stakes skills performance exams. This method builds confidence and improves skill development by reducing but not eliminating testing stress and anxiety. Students remain in control of their peer team performance testing environment with faculty available for consultation on points of skill technique clarification and remediation.

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