

Giving and Receiving Peer Feedback: Effect on Undergraduate Nursing Students' Knowledge Acquisition and Information Retention? An Exploratory Study

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Abstract

Peer feedback has been used in the academic setting to enhance learning in students. The aim of this study was to examine the effectiveness of giving and receiving peer feedback as perceived by undergraduate sophomore nursing students at a large faith-based university in the northeast U.S. A descriptive cross-sectional design was utilized to collect data using a pre-survey, followed by peer review of videos of five physical assessment skills by 30 students. The students completed a reflection after reviewing each skill and a post-survey at the end of all skills. Comparison of the preintervention scores with post-intervention scores using t-tests indicated that giving feedback helped them retain information. Additionally, data indicates students enjoyed the process of peer feedback. Using peer feedback at the commencement of nursing school may increase the comfort level of the students to give and receive feedback. This could be translated into enhanced leadership in clinical practice to impact patient safety and advocacy.

Introduction

Giving and receiving feedback among students of the same level may be ideal for learning. The term peer feedback is operationally defined as students in the same course level critiquing each other's work intentionally to enhance learning and confidence in the performance of those skills.

Purpose and Research Question

Purpose: The purpose of this study was to examine the effect of peer feedback about physical assessment skills on knowledge acquisition and information retention in sophomore nursing students who were in physical assessment classes.

Research Question: How does peer feedback on physical assessment skills improve learning and retention of information in sophomore nursing students in a physical assessment class?

Literature Review

Four themes emerged from the literature review:

Theme 1: Student-Led Experience

- Lack of pressure due to student feedback vs. faculty
- Able to comprehend material better repetition
- Enhanced academic setting more in-depth feedback with 1:1 ratio

Theme 2: Constructive Process

- Video format better recall of performance, pause/play feature
- Anonymity allows detailed feedback with no bias

Theme 3: Preparation for Quality Feedback

- Proper Training is essential for the right process
- Quality of feedback dependent on training and practice

Theme 4: Positive Future Impact

- Improve nursing skill acquisition
- Learn nursing professionalism leadership, communication
- Learn to give and receive feedback from peers

Methods

Design: A descriptive cross-sectional design
Setting: School of Nursing Sophomore level course
Population/Sample: 30 volunteer nursing students

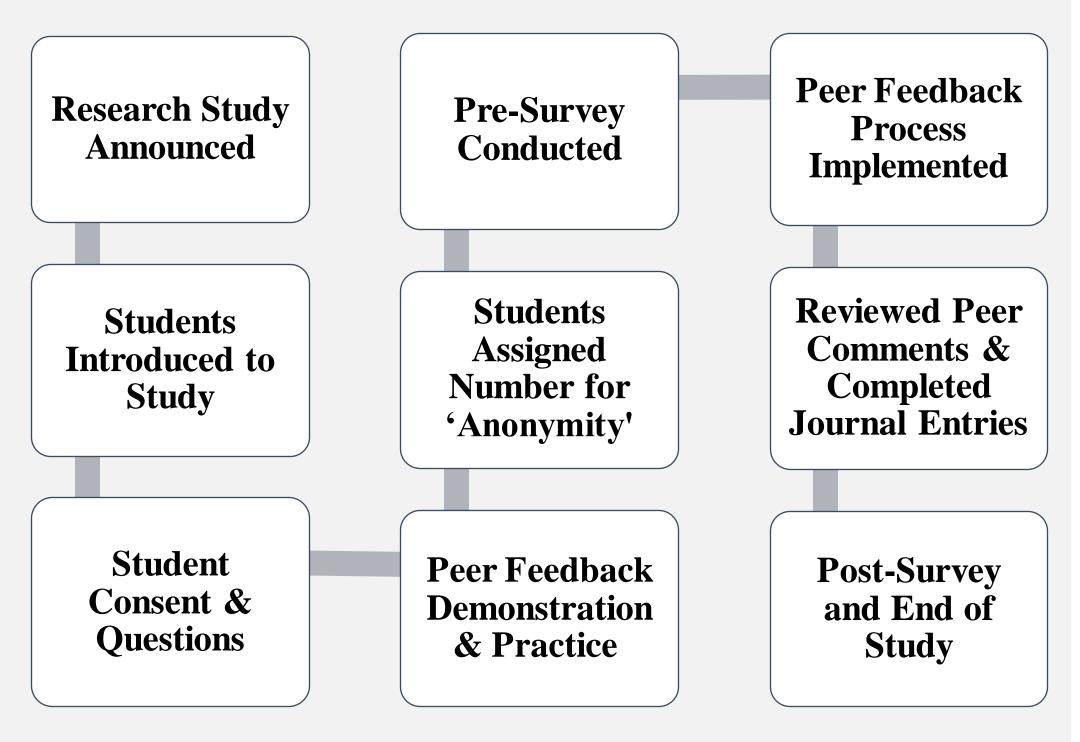
Ethical Considerations:

- Study approved by IRB
- Students completed informed consent
- Students were assigned a number for confidentiality
- Volunteers were given a \$25.00 gift card
- All documents were kept in a locked cabinet

Tools: Three tools were used to collect data

- Demographic data
- Pre-post surveys (Developed by the researchers based on the literature reviewed)
- Weekly reflection questions

Figure 1. Procedure: Recruitment of participants



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Results

- 1. Enhanced Skills: Watching the performance of peers, students self-reflected to enhance their performance.
- "My peer had a very inclusive, descriptive explanation of what they saw using the ophthalmoscope. During my assessment, I was not completely sure how to best describe that, so her description helped me learn what I should be seeing and saying."
- 2. Learned New Methods: Watching videos of peers for feedback allowed them to discover new methods of skills assessment.
- "Different ways", "different techniques" and "different approaches" were expressions made by students.
- 3. Plan for Improvement: Watching peers perform and receiving feedback from peers provided tools to improve my own assessments
 - "Performing better", "performing differently", "learning corrections", and "making improvements" were expressions made by the students.

Figure 2. Themes from the study Post-Peer Feedback Learned New Methods Plan for Improvement

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Table 1.Statistically Significant Findings

Statistically Significant Findings			
Student Perception Statements	Pre-Survey	Post-Survey	Increased or Decreased?
"Peer feedback helped me retain the information that I learned"	M= 3.48 SD= 1.18	M= 4.23 SD= 0.86	Increased t(53)= -2.65, p = .01
"Peer feedback increased my knowledge and understanding of physical assessment"	M= 4.21 SD= 0.68	M= 4.50 SD= 0.58	Increased $t(53)=-1.71, p=.05$
"I felt uncomfortable giving peer feedback"	M= 2.69 SD= 1.14	M= 2.15 SD= 1.16	Increased t(53)= -1.73, p = .05
"Peer feedback improved my learning experience"	M= 4.45 SD= 0.63	M=4.00 SD= 0.85	Decreased $t(53)=2.24$, $p=.02$
"I enjoyed the experience of giving peer feedback"	M=3.52 SD=0.83	M=3.96 SD= 1.00	Increased t(53)= -1.80, p =.04

Enhanced Skills

Discussion

Findings:

There are three key findings; The students perceived:

• Enhanced skills, learned new methods, and plan for improvement.

The study found *insignificant* data including peer feedback increasing confidence in performing skills, understanding the material better, reflecting on ways to improve skills, performing better on subsequent skills checklist, reflecting on errors and improving performance, and positively improving their learning experience

Conclusion

- Peer feedback helps in knowledge acquisition and information retention. Application of Peer review in undergraduate program will equip them well for leadership and collaboration
- Comparison with Literature: Students who participated in the study believed that using the peer feedback process helped them recognize and correct errors in their assessment skills, and knowledge retention.

Figure 3. *Implications*

Practice

- Students develop greater comfort in giving and receiving feedback
- Peer feedback allows students to perform skills correctly and retain knowledge
- Peer feedback must be given in a professional/respectful way to improve skills

Education

- Implement peer feedback into the educational process in nursing schools
- Train the students how to give constructive and respectful feedback

Research

- Benefits and methods of training students on peer feedback to provide the most quality and constructive criticism
- Longitudinal impact of using peer-feedback
- Variations in effect on blinded or face-to-face or virtual feedback

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Limitations:

- One location and only three faulty were supervising
- Timing of the video review was based on faculty availability: This might have affected a wholesome feedback
- Small sample size; Mostly females; only two males
- Confidentiality: students viewed the videos of their peers which presents a potential breach of confidentiality

References



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