

Nursing Education Research Conference 2018 (NERC18)

The Effect of Virtual Clinical Simulation Debriefing on Clinical Decision Making

Tamara Jessica Brown, MSN, RN-BC, PCCN, CMSRN, CNE

School of Nursing, La Salle University, Philadelphia, PA, USA

Title: Evaluating the Effects of Virtual Clinical Simulation Debriefing on Clinical Decision Making (Ongoing work/Project)

Background/Significance: New graduate nurses providing competent and safe patient care, yet recent evidence supports that such graduates with even up to three years of clinical experience are unprepared to think like nurses. In general, simulation-based education has emerged as an innovative method of providing nursing students with opportunities to acquire essential knowledge, skills, and attitudes which are necessary for the development of clinical judgment competence. There is an increasing amount of evidence that demonstrates the relationship between simulation debriefing and improved nursing student clinical (Sabei & Lasater, 2016).

Specifically, virtual simulation clinical education has emerged as an innovative strategy that has the potential to improve clinical reasoning by providing experiential learning in a virtual. However, such studies of virtual simulation often do not mention or include a debriefing session as a part of its intervention. The literature finds that there is a widespread lack of consistent methodological approaches for debriefing practice and unclear descriptions of debriefing in simulation-based education studies completed particularly on virtual clinical simulation, discussions of debriefing are entirely absent (National League of Nursing, 2015).

Scope: This study will expound on previous research of the use of debriefing during simulation. It will add to the literature by explaining the effect of debriefing on virtual simulation learning outcomes, specifically clinical decision making.

Research Question and Hypothesis: The research question this study will seek to answer is: How does the presence or absence of debriefing a virtual simulation influence the clinical decision making scores of undergraduate nursing students?

It is hypothesized that undergraduate nursing students who attend a debriefing session following virtual simulation will have higher clinical decision making scores than those who do not. The Health Sciences Reasoning Test (HRST) will be used to operationalize the dependent variable of clinical decision making

Purpose: The objective of this study is to test David Kolb's (1984) theory of experiential learning that learner reflection through debriefing is related to improved clinical decision making in undergraduate nursing students who utilize virtual clinical simulation as a learning strategy.

Method/Outcome Measures: The researcher has selected a true experimental design. Subjects will be undergraduate nursing students who are enrolled in a medical surgical course with a required virtual clinical simulation assignment component. Once subjects are recruited, half of a single semester's medical-surgical courses that include participants of equivalent numbers will be deemed either the experimental group (with an assigned debriefing session) or control group (without an assigned debriefing session) by using a random number generator. Both groups will be administered the HRST before being assigned virtual clinical simulation assignments. However, only the experimental group will receive the treatment of a debriefing session.

The HSRT overall reasoning skills score focuses on the strengths or weaknesses of the student's ability to make reflective, reasoned judgments about what to believe or what to do. The overall internal

consistency of the tool is reported to be 0.81. The overall reliability coefficient is reportedly 0.81 (Insight Assessment, 2015).

Findings: This research study is currently in progress and is anticipated to be completed by June of 2018.

Title:

The Effect of Virtual Clinical Simulation Debriefing on Clinical Decision Making

Keywords:

clinical decision making, debriefing and virtual simulation

References:

DeGagne, J.C., Oh, J., Kang, J., Vorderstrasse, A.A., & Johnson, C.M. (2013). Virtual worlds in nursing education: A synthesis of the literature. *Journal of Nursing Education*, 52(7), 391-396.

Insight Assessment. (2015). *Health sciences reasoning test user manual*. San Jose, CA: The California Academic Press.

Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.

National League of Nursing. (2015). Debriefing across the curriculum. Retrieved from [http://www.nln.org/docs/default-source/about/nln-vision-series-\(position-statements\)/nln-vision-debriefing-across-the-curriculum.pdf?sfvrsn=0](http://www.nln.org/docs/default-source/about/nln-vision-series-(position-statements)/nln-vision-debriefing-across-the-curriculum.pdf?sfvrsn=0)

Sabei, S.D. & Lasater, K. (2016). Simulation debriefing for clinical judgment development: A concept analysis. *Nurse Education Today*, 45, 42-47.

Abstract Summary:

The objective of this study to test the theory of experiential learning that learner reflection through debriefing is related to improved clinical decision making in undergraduate nursing students who utilize virtual clinical simulation as a learning strategy.

Content Outline:

- Title
 - Evaluating the Effects of Virtual Clinical Simulation Debriefing on Clinical Decision Making (Ongoing work/Project)
- Background/Significance
 - New graduate nurses providing competent and safe patient care, yet recent evidence supports that such graduates with even up to three years of clinical experience are unprepared to think like nurses. In general, simulation-based education has emerged as an innovative method of providing nursing students with opportunities to acquire essential knowledge, skills, and attitudes which are necessary for the development of clinical judgment competence. There is an increasing amount of evidence that demonstrates the relationship between simulation debriefing and improved nursing student clinical (Sabei & Lasater, 2016).
 - Specifically, virtual simulation clinical education has emerged as an innovative strategy that has the potential to improve clinical reasoning by providing experiential learning in a virtual. However, such studies of virtual simulation often do not mention or include a debriefing session as a part of its intervention. The literature finds that there is a

widespread lack of consistent methodological approaches for debriefing practice and unclear descriptions of debriefing in simulation-based education studies completed particularly on virtual clinical simulation, discussions of debriefing are entirely absent (National League of Nursing, 2015).

- Scope
 - This study will expound on previous research of the use of debriefing during simulation. It will add to the literature by explaining the effect of debriefing on virtual simulation learning outcomes, specifically clinical decision making.
- Research Question and Hypothesis
 - The research question this study will seek to answer is: How does the presence or absence of debriefing a virtual simulation influence the clinical decision making scores of undergraduate nursing students?
 - It is hypothesized that undergraduate nursing students who attend a debriefing session following virtual simulation will have higher clinical decision making scores than those who do not. The Health Sciences Reasoning Test (HRST) will be used to operationalize the dependent variable of clinical decision making
- Purpose
 - The objective of this study is to test David Kolb's (1984) theory of experiential learning that learner reflection through debriefing is related to improved clinical decision making in undergraduate nursing students who utilize virtual clinical simulation as a learning strategy.
- Method/Outcome Measures
 - The researcher has selected a true experimental design. Subjects will be undergraduate nursing students who are enrolled in a medical surgical course with a required virtual clinical simulation assignment component. Once subjects are recruited, half of a single semester's medical-surgical courses that include participants of equivalent numbers will be deemed either the experimental group (with an assigned debriefing session) or control group (without an assigned debriefing session) by using a random number generator. Both groups will be administered the HRST before being assigned virtual clinical simulation assignments. However, only the experimental group will receive the treatment of a debriefing session.
 - The HSRT overall reasoning skills score focuses on the strengths or weaknesses of the student's ability to make reflective, reasoned judgments about what to believe or what to do. The overall internal consistency of the tool is reported to be 0.81. The overall reliability coefficient is reportedly 0.81 (Insight Assessment, 2015).
- Findings
 - This research study is currently in progress and is anticipated to be completed by June of 2018.

First Primary Presenting Author

Primary Presenting Author

Tamara Jessica Brown, MSN, RN-BC, PCCN, CMSRN, CNE

La Salle University

School of Nursing

Assistant Professor

Philadelphia PA

USA

Professional Experience: -Georgian Court University-School of Nursing Assistant Professor/ Clinical Course Coordinator (8/2015-present) of Adult Health I, Adult Health I Clinical Course Coordinator and Manager, Nursing Capstone -Health Care Journalist/Correspondent (1/2015-present) Asbury Park Press - New Jersey City University, School of Nursing, (2012- present) Clinical Instructor and Lecturer of Adult Health I Clinical, Adult Health II Theory and Clinical, Fundamentals, Health Assessment Laboratory, NJCU HRSA Grant Nurse Residency Skills Session Instructor -Georgian Court University, School of Nursing, Clinical Instructor and Lecturer (2012-2015) -Rutgers University, School of Nursing-Camden, (2015-present) Part Time Lecturer of Adult Health/Geronotology Clinical -Rutgers University, College of Nursing-Newark (2015-present) Part Time Lecturer of Adult Health II Clinical -Clinical Nurse Specialist (5/2013 – 7-2015)Ocean Medical Center -Registered Nurse (8/2009-8/2013)- Jersey Shore University Medical Center- Mehandru 5 Telemetry/ Medical Surgical Unit / Partial Patient Observation Unit .Extended Roles:Ocean County Community College Preceptor,Brookdale Community College Preceptor Georgian Court University nursing tutor

Author Summary: Tamara Jessica Brown is an Assistant Professor of La Salle University's School of Nursing of Philadelphia,PA. She has 8 years of experience in nursing with certifications in medical-surgical and gerontological nursing, progressive critical care, and is a Certified Nurse Educator through the NLN. She currently is a doctoral candidate of nursing education at NOVA Southeastern University. She has been tutoring since obtaining her baccalaureate degree currently volunteers her time tutoring nursing students.