

Title: Comparison of Simulation Exposure in Accelerated Undergraduate Nursing Education and its Effect on Critical Thinking Development
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Aim

The aim of the study was to determine what effect simulation percentage for substitution of traditional clinical time had on accelerated nursing students' critical thinking skills, as measured by the Health Education Systems Incorporated (HESI) exit exam critical thinking sub-scores from undergraduate nursing cohorts.

Background

Simulations can provide the environment for learners to enhance their critical thinking skills through repeated practice, reflection, and retention of experiences, which may impact the care and safety of their patients in the future (Jeffries, 2007). Researchers have noted a lack of valid and reliable instruments to measure critical thinking in nursing students (Jeffries, 2007; Kneebone, 2003; Nehring, 2008). HESI scores are used by the university in this study to assess graduate's readiness for the NCLEX exam, as well as to evaluate undergraduate nursing program outcomes.

Theoretical Framework

Benner's (1984), model *From Novice to Expert*, provides a theoretical framework for identifying nursing knowledge acquisition and level of expertise, and underpins this study. Benner (1984), proposed that the different levels of skill reflect changes in three aspects of skilled performance; that movement from abstract principles to using past experiences guide actions, that a change in the learner's perception occurs and the ability to put separate pieces together as a whole develop, and that the learner is no longer an observer outside the situation, but is actively engaged in the situation.

Method

The quasi-experimental two-group pre-post design with a historical control group, compared HESI critical thinking scores of accelerated nursing students who were exposed to simulation for 10% of their traditional clinical time compared to accelerated nursing students who were exposed to simulation for 25% of their traditional clinical time, in an undergraduate baccalaureate nursing program. Data analysis using SPSS was used to analyze within and between group differences and includes independent t-tests, and multiple linear regression.

Results

There were significant differences in the means in the critical thinking scores between students that had 10% and 25% simulation ($p=0.022$), and the nursing judgement competency scores between students that had 10% and 25% simulation ($p=0.013$). Specifically, there were higher mean scores for groups of students who experienced 10% simulation.

Conclusion/Implications

This study provides interesting findings for the relationship of simulation percentage on the development of critical thinking and nursing judgement skills in undergraduate nursing students. Implications for nursing education should include further multisite studies comparing percentages of simulation education in schools of nursing using simulation and those without simulation.

References

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