Real-life Applications to Enhance RN-BSN Students’ Knowledge and Learning Quantitative Research Design at Weber State University

Colby Bostock, BSN, RN, MSN Student

PROJECT METHODOLOGY

The focus of the project is to promote student learning of quantitative research designs by implementing real-life examples of these designs in the curriculum, NRSG 4200, Scholarship for EBP. Learning Outcomes include the following:

1. The students will be able to compare and contrast the three major categories of quantitative research designs: experimental, quasi-experimental, and non-experimental.
2. The students will be able to compare and contrast independent, dependent, and extraneous variables.
3. The students will be able to analyze the ways to reduce the threats to internal and external validity in research.
4. The students will be able to determine sampling and data collection methods for quantitative research.

Project Plan and Implementation

- Created instructional videos, using the following research designs in templates:
  - Experimental
  - Quasi-experimental
  - Non-experimental
- Canvas Learning System was used to post the research designs.
- Students enrolled in NRSG 4200, Scholarship for EBP, are expected to complete the assignment and distinguish components of a quantitative study. The template used as part of the intervention is the same template used currently in NRSG 4200, Scholarship for EBP; however, the students are required to find a research article and complete the template on their own. The goal is to evaluate whether students can achieve the learning outcomes and whether the instructional videos and template examples help students learn the basic principles of quantitative research design.

Evaluation Methods

The evaluation method includes the following:

- The templates (Experimental, Quasi-experimental, and Non-experimental) utilized by the students to complete the NRSG 4200, Scholarship for EBP assignment, distinguishing components of a quantitative study, assignment will be evaluated using a rubric that is currently utilized for evaluation of the assignment.
- The reason for keeping the same template, rubric, and student learning outcomes is to evaluate and compare student scores on the same assignment post-project implementation with student scores from previous semesters.

THEORETICAL FRAMEWORK

The theoretical framework chosen for this project is the adult learning theory by Malcolm Knowles. (6, 7)

- This theory is based on andragogy, which focuses on adult learning rather than youth learning.
- Knowles believed that adult learners are responsible for their own knowledge.
- Knowles created six assumptions of adult learners: need to know, self-concept, experience, readiness to learn, orientation to learning, and motivation.
- As a nurse, one needs to understand evidence related to quantitative designs to ensure that best practice is implemented. This aligns with the principle of Knowles' theory that states that adult learning is problem-centered.

CONCLUSIONS

- RN to BSN students’ understanding of quantitative research design can be improved through the implementation of real-life examples.
- Students’ understanding of quantitative research design is imperative to clinical practice by improving patient safety and patient outcomes.
- When students have an adequate understanding of quantitative research designs, findings show enhanced nursing practice.

REFERENCES