

### The Sinking Ship: An Innovative Strategy for Teaching Research Sampling

Undergraduate nursing students may struggle to find the relevance and value of nursing research courses contributing to a lack of interest and participation. As a result, engaging students in a nursing research course presents a particular challenge for nursing faculty (Phillips, 2014). Traditional lecturing is not always effective in facilitating learning, as students are not given an opportunity to process and integrate new information (Dean & Wright, 2017). When students learn by actively engaging in course content, nearly every aspect of their learning experience changes. The role of the nurse educator shifts. He or she is no longer the content expert, doling out copious amounts of information. Additionally, student behavior changes. Instead of being a passive participant in the classroom, learners pursue their own understanding of the concepts. Integrating an interactive classroom activity encourages student participation and content understanding and enhances deep learning (Huda, Ali, Nanji, & Cassum, 2016). In an attempt to increase learning opportunities and increase student engagement within an undergraduate nursing research course, the “Sinking Ship” exercise introduced students to the concept of research sampling.

Prior to the start of class, students were assigned to read the accompanying textbook chapter on research sampling. At the beginning of class students were asked to pick an M&M® candy without looking inside of the bag. Once each stu-

dent had a piece of candy, they were told to move their seat and sit with the classmates who had the same colored M&M. Once in their group, the students were given the following Sinking Ship activity to complete.

*Scenario:* You are on a cruise ship. The ship is sinking. There is an uninhabited island a few miles away, but the waters are shark infested. You get in the only lifeboat, and six people can fit in the lifeboat with you. Select the six people from the ship that you will take with you in your boat:

- CEO, male, age 40.
- Professional wrestler, male, age 28.
- Farmer, male, age 46.
- Surfer, male, age 21.
- Police officer, male, age 39.
- Homemaker, female, age 35.
- Nurse, male, age 40.
- Doctor, female, age 62.
- Comedian, male, age 35.
- Student, male, age 8.
- Pregnant teenager, female, age 17.
- Lawyer, female, age 36.
- Religious leader, male, age 29.

Following completion of the group activity, students were asked to share the results of their activity, along with an explanation of the methodology used for determining their selection. Students were then introduced to the concepts of research sampling through Socratic questioning and revisiting the Sinking Ship exercise. First, students were asked to identify the type of sampling procedure that occurred using the colored M&Ms. Next, students were asked to revisit the exercise and apply sampling concepts to the exercise, such as convenience, quo-

ta, purposive, simple random, stratified random, and systematic sampling. After each type of sampling, students worked within their group and critiqued the sample population they obtained from the exercise and discussed the quality of the sample. The classroom activity concluded with a class discussion on the quality of evidence that a study yields and the impact of the sampling plan on the study.

The students had positive feedback for this learning activity. The activity stimulated physical activity by asking the students to relocate their seats and to work in groups. The exercise provided students with an opportunity to apply the concepts of sampling to a simple activity while evaluating the results of each sampling method. Students reported a clear understanding of the concepts presented during the lecture and were able to meet the learning objectives of the lesson plan.

### References

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