Evolving Attitudes Toward Research in Undergraduate Nursing Honors Students

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Background: Q methodology is a set of philosophical principles, data collection techniques, and statistical procedures to study subjectivity used to generate theory, test theory, or evaluate program outcomes (Hensel, 2017; Ramlo, 2015; Ramlo, 2016). When used for undergraduate research, Q is thought to contribute to positive student and faculty outcomes (Hensel, 2016). The purpose of this project was to evaluate changes in attitudes about research among a cohort of five nursing students who conducted Q methodology studies as part of an undergraduate honors program.

Methods: The students generated a set of 36 statements, reflecting various attitudes about undergraduate research. Then they rank-ordered their level of agreement or disagreement with each statement on a -4 to +4 sorting sheet based on two conditions of instructions. First they sorted the items based on their current attitudes about research, after having participated in one semester of the nursing honors program where they completed a literature review, designed their Q study, and submitted their proposal to IRB. One student had collected data, but not yet analyzed it. Next students completed a second sort based on how they felt about research before they began the honors program.

Data analysis included principal components factor analysis and varimax rotation with Ken Q software and a standard process described by Watts and Stenner (2012).

Results: A 2-factors final solution explained 70% of the variance. Factor 1 was characterized by believing that participating in undergraduate research could distinguish students from their peers and get them into advanced education programs, like graduate school. Seven sorts loaded on Factor 1, including all sorts completed reflecting current attitudes.

Factor 2 was characterized by believing that undergraduate research was intimidating and too time consuming. The 3 sorts loading on Factor 2 reflected only attitudes before beginning the honors program.

Discussion: After engaging in one semester of an honors program and designing a Q study, all students strongly believed that they benefited professionally. More research is needed to determine how much the structured processes associated with doing a Q study contributed to the evolution of positive attitudes.

Table 1: Factor 1

Table 2: Factor 2

References