Relationships Among Attitude Toward Learning Concept Mapping, Critical Thinking, and Learning Outcomes in Nursing Students

Shu Yuan Lin, PhD, RN
Nursing, Kaohsiung Medical University, School of Nursing, Kaohsiung, Taiwan

Purpose: The study purposes were to explore the relationship among attitude toward learning concept mapping, critical thinking and learning outcomes after introducing concept mapping module in junior nursing students, and the predictors of critical thinking and learning outcomes. Methods: The study was a longitudinal study design. Participants consisted of 74 junior nursing students in a university at southern Taiwan. All participants received a total of six hours of concept mapping module that included a lecture, one practice section, two group discussions and an oral presentation in Medical-Surgical Nursing course. Measures of variables were numeric scales of learning motivation, perceived learning capability, grade of concept mapping, grade of Medical-Surgical Nursing course, scales of attitude toward learning concept mapping and critical thinking. Scales were measured before and after introducing concept mapping module during a semester. Cronbach’s α coefficients for scales of attitude toward learning concept mapping and critical thinking were .94 and .84 separately. Descriptive statistics and stepwise regression were done in SPSS 20. Results: Seventy-eight percent of participants were female. The mean age was 19.6 (SD=0.7). Moderate correlations were found between attitude toward learning concept mapping and critical thinking before and after introducing concept mapping module (r=.44-.47). Three predictors including attitude toward learning concept mapping before and after introducing concept mapping module and learning motivation explained 34.5% of total variance to critical thinking. Perceived learning capability and grade of concept mapping were predictors of learning outcomes as indicative of grade of Medical-Surgical Nursing course and they explained 34.3% of total variance. Conclusion: Students' attitude toward learning concept mapping regard to concept mapping module had a significant influence on students' critical thinking. The concept mapping module may increase active learning attitude and lead to meaningful learning of Medical-Surgical Nursing context. We suggest further study to explore the protocol of concept mapping module and measure the relationship between critical thinking and self-directed learning behaviors.

Title:
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Keywords:
Concept mapping, critical thinking and nursing student

References:

Abstract Summary:
Attitude toward learning concept mapping regard to concept mapping module had a significant influence on critical thinking for nursing students. The concept mapping module may increase active learning attitude and lead to meaningful learning of Medical-Surgical Nursing context.

Content Outline:
Background: Concept mapping is a learning strategy that helps students to improve critical thinking.
Purpose: The study purposes were to explore the relationship among attitude toward learning concept mapping, critical thinking and learning outcomes after introducing concept mapping module in junior nursing students. Methods: 1. The study was a longitudinal study design. 2. Participants: 74 junior nursing students in a university at southern Taiwan, receiving a total of six hours of concept mapping module. 3. Measures: numeric scales of learning motivation, perceived learning capability, grade of concept mapping, grade of Medical-Surgical Nursing course, scales of attitude toward learning concept mapping and critical thinking. Results: 1. Moderate correlations were found between attitude toward learning concept mapping and critical thinking before and after introducing concept mapping module (r=.44-.47). 2. Predictors including attitude toward learning concept mapping and learning motivation explained 34.5% of total variance to critical thinking. 3. Predictors including perceived learning capability and grade of concept mapping explained 34.3% of total variance of grade of Medical-Surgical Nursing course. Conclusion: 1. Students’ attitude toward learning concept mapping had a significant influence on students’ critical thinking. 2. The concept mapping module may increase active learning attitude and lead to meaningful learning of Medical-Surgical Nursing context.

First Primary Presenting Author

Primary Presenting Author
Shu Yuan Lin, PhD, RN
Kaohsiung Medical University, School of Nursing
Nursing
Associate professor
Kaohsiung
Taiwan

Professional Experience: I am interested in long-term care field, as well as gerontological nursing. I am currently worked as a nursing faculty and engaging in nursing education study about concept mapping. I also work collaboratively with clinicians in topics of evidence-based Nursing.
Author Summary: An experienced educator and researcher, who are interested in patient safety in acute care setting and long-term-care setting. An advocator of evidence-based practice and research.