



Lorestan University of Medical Sciences
Faculty of Khorramabad Nursing &Midwifery

A Thesis
Presented for the
Degree of Master of Sciences
In Medical-Surgical Nursing

Title
The Effect of the Online Flipped Classroom on Self-Directed Learning Readiness
and Metacognitive Awareness in Nursing Students

By: Safoura Khodaei

Supervisor: Dr. Shirin Hasanvand

Advisores: Dr. Mohammad Gholami
Dr. Yaser Mokhayeri

2021

Abstract

Introduction: Computer-based learning and problem-based learning environments increase students' self-directed learning readiness and metacognitive awareness. The flipped classroom learning model is known as a hybrid approach that can affect students' self-directed learning readiness and metacognitive awareness. To this end, the present study was conducted to determine the effect of completely online flipped classroom on self-directed learning readiness and metacognitive awareness of nursing students.

Methods: The present study is a quasi-experimental pretest-posttest. 34 fourth semester students of Khorramabad School of Nursing and Midwifery who were studying in the first semester of 2020-2021, and had matriculated for the course of the theoretical unit of adult and elderly nursing, were selected by counting method and based on selection criteria. Asynchronous online training was used during the first eight weeks of the semester on nursing disorders of the kidneys and genitourinary tract, and for the second eight weeks, online flipped classroom training was used for cardiovascular patients. The selected Students filled out self-directed learning readiness scale and metacognitive awareness online flipped classroom before, during, and after the semester. Data were analyzed using paired t-test in Stata-14 software.

Results: There was no significant difference between the score of metacognitive awareness before and after online asynchronous learning ($p=0/15$), but the score of self-directed learning readiness increased significantly after online asynchronous course ($p=0/0004$), also After employing online flipped classroom, students' mean (SD) scores of metacognitive awareness and self-directed learning readiness were 272/03 (53/03) and 162/03 (21/77), which confirmed their significant improvement compared to the scores before the online flipped classroom. Comparing the mean score changes of both methods indicated that their implementation did not lead to significant differences between the total score of metacognitive awareness ($P\text{-value}=0/15$) and the total score of self-directed learning readiness ($P\text{-value}=0/07$).

Conclusion: The results of our study showed that the online flipped classroom approach improves skills such as self-directed learning readiness and metacognitive awareness of nursing students, but there was no significant difference between the online flipped classroom method and the asynchronous online method.

Keywords: Flipped Classroom, Online Learning, Self-directed Learning, Metacognitive Awareness, Nursing Students