Exploring the roles of interaction and flow in explaining nurses’ e-learning acceptance

Yung-Ming Cheng
Department of Business Administration, Chaoyang University of Technology, No.168, Jifeng E. Rd., Wufeng District, Taichung City 41349, Taiwan // ymcheng@mail.cyut.edu.tw

Abstract
To provide safe and competent patient care, it is very important that medical institutions should provide nurses with continuing education by using appropriate learning methods. As compared to traditional learning, electronic learning (e-learning) is a more flexible method for nurses’ in-service learning. Hence, e-learning is expected to play a pivotal role in providing continuing education for nurses. This study’s purpose was to explore the role and relevance of interaction factors, intrinsic motivator (i.e., flow), and extrinsic motivators (i.e., perceived usefulness (PU) and perceived ease of use (PEOU)) in explaining nurses’ intention to use the e-learning system. Based on the technology acceptance model (TAM) with the flow theory, this study’s research model presents three types of interaction factors, learner-system interaction, instructor-learner interaction, and learner-learner interaction to construct an extended TAM to explore nurses’ intention to use the e-learning system. Sample data were gathered from nurses at two regional hospitals in Taiwan. A total of 320 questionnaires were distributed, 254 (79.375%) questionnaires were returned. Consequently, 218 usable questionnaires were analyzed in this study, with a usable response rate of 68.125%. First, confirmatory factor analysis was used to develop the measurement model. Second, to explore the causal relationships among all constructs, the structural model for the research model was tested by using structural equation modeling. The main research results are summarized as follows. First, learner-system interaction, instructor-learner interaction, and learner-learner interaction respectively had significant effects on PU, PEOU, and flow. Next, flow had significant effects on PU and PEOU, and PEOU had a significant effect on PU. Finally, the effects of flow, PU, and PEOU on intention to use were significant. Synthetically speaking, learner-system interaction, instructor-learner interaction, and learner-learner interaction can indirectly make significant impacts on nurses’ usage intention of the e-learning system via their extrinsic motivators (i.e., PU and PEOU) and intrinsic motivator (i.e., flow).

Keywords: Interaction, Flow, Nurses’ e-learning acceptance.