The Effects of Information Systems Quality on Nurses’ Acceptance of the E-learning System

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 ensure the quality of healthcare provision, nurses must continuously enhance their professional knowledge and competencies via continuing education. 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 key role in providing continuing education for nurses. The main purpose of this study is to examine whether system quality, information quality, service quality, and user-interface design quality as the antecedents to nurse beliefs can affect nurses’ intention to use the e-learning system. A cross-sectional design was used to investigate the effects of information systems quality on nurses’ acceptance of the e-learning system. This study gathered sample data from nurses at three hospitals in Taiwan. A total of 450 questionnaires were distributed, and 320 effective questionnaires were analyzed in this study, indicating an effective response rate of 71.1%. Collected data were analyzed using structural equation modeling. The main research results are summarized as follows. System quality, information quality, and user-interface design quality have significant effects on perceived usefulness (PU), perceived ease of use (PEOU), and perceived enjoyment (PE), and service quality has significant effects on PU and PEOU. Besides, PEOU has significant effects on PU and PE, and the effects of PU, PEOU, and PE on intention to use are significant. User-interface design quality is the most key antecedent that can make significant impacts on nurses’ PU and PE, more efforts should be made to develop friendlier user interface via designing useful and enjoyable features to induce nurses to use the e-learning system. Besides, system quality can make the greatest impact on nurses’ PEOU, thus medical institutions should effectively enhance the system quality to deliver benefits and pleasures to boost nurses’ usage intention of the e-learning system via reducing the complexity.

Keywords: system quality, information quality, service quality, user-interface design quality, nurses’ acceptance of the e-learning system.