現代醫療儀器科技創新性與使用者認知效能研究

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摘要

本研究以科技接受模式當中外部變數影響認知效能的理論觀點為主軸,探討高科技醫療儀器的功能屬性與創新性之內涵,透過文獻探討與專家學者對醫療產品科技之構面效度詮釋及歸類,進而獲取代表科技創新性之五項功能屬性面向,包括反應性、自主性、複雜性、學習與記憶性與多功能等,並進一步探索科技屬性對 TAM 當中職務相關性、產出品質與結果明確性等使用者認知之科技效能的影響性,以及瞭解其影響認知有用性的歷程。本研究採專家調查法、個案訪談法與問卷調查法取得資料,研究結果發現部分創新科技屬性將提升醫療人員認知科技效能,進而增強其對醫療品質受到提升的觀感以及醫療科技的有用性。

關鍵字:醫療儀器、科技創新性、科技效能、認知有用性、科技接受模式

Study on the Perceived Effectiveness in the Technological Innovation of Modern Medical Instruments

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Abstract

In this study, the user's perceived usefulness to the medical instruments was investigated to clarify the relatedness between the instrumental technology and medical quality. For the sake of rationale measurement, the five technological features of medical instruments including reaction, autonomy, complexity, learning and memory and multi-function were operationalized through the process of literature review and expert's identification.

Thesefeatures were hence applied to explore their essential influences on user's perceived effectiveness including the job relevance, output quality, the result demonstrability and perceived usefulness that were derived from part of the TAM structure. Eventually, this study found that some of the technological features of modern medical instruments would facilitate the professional user's perceived effectiveness. Hence, it would strengthen the medical quality and the impression of medical technology usefulness as well.

Keywords: Medical instruments; Technological innovation; Technology effectiveness; TAM Model.