

# 建立並驗證以科技整合模型(UTAUT Model)為基礎的健康管理流程對於民眾使用體位控制APP黏著度之影響

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## 摘要

每個人的健康體重隨著年齡、性別、身高而異，世界衛生組織 (WHO) 建議以身體質量指數 (Body Mass Index, BMI) 來界定健康體重標準。以我國成人來說，BMI 值介於 18.5 至 23kg/m<sup>2</sup> 為健康體重的範圍，倘若 BMI 過高，數值大於 35 以上，則屬於病態性肥胖。對於嚴重肥胖或病態性肥胖的人來說，心理上常缺乏自信心，因而減少許多社交及就業機會；健康上，除了造成體能衰退，甚至還可能導致代謝症候群、血脂異常、糖尿病、高血壓、高尿酸血症 (痛風)、骨性關節炎、冠狀動脈心臟病、乳癌、子宮內膜癌、大腸癌等疾病，國人十大死因中，就有八項死因與肥胖有關，顯見維持健康體重的的重要性。

此計畫應用於臺北榮總體重控制門診的健康管理流程加入科技應用，並以科技整合模型為基礎來設計驗證為健康管理新流程。研究顯示，針對體重控制，面對面的臨床門診介入及科技應用 APP 介入相比，兩者整合會比單一形式來的有效。另有研究針對體位控制行動裝置 APP 內容探討指出，社群影響也佔重要部分，目前並沒有針對體位控制有良好的理論模型作為依據，但卻有已整合型科技模式對於醫療自助化服務科技來做醫院服務流程的改善。整合科技模型 (UTAUT Model) 是由 Venkatesh 等人在西元 2003 年提出，整合八種科技接受模型，分別是理性行為理論 (TRA)、技術接受模型 (TAM)、動機模型 (Motivational Model，簡稱 MM)、計畫行為理論 (Theory of Planning Behavior，簡稱 TPB)、組合技術接受模型和計畫行為理論的模型 (Combined TAM and TPB，簡稱 C—TAM—TPB)、電腦可用性模型 (Model of PC Utilization，簡稱 MPCU)、創新擴散理論 (Innovation Diffusion Theory，簡稱 IDT) 以及社會認知理論 (Social Cognitive Theory，簡稱 SCT) 等八個理論模型的基礎上，將主要因素進行整合而形成的綜合模型。變數包含：績效預期、努力預期、社群影響、便利條件、行為意向、行為、性別、年齡、經驗、自願使用，而構建出一種整合性理論模型，模型解釋力達 70% 以上，較單獨任一理論模型解釋力為高。本計畫將致力解決要如何針對以科技整合模型 (UTAUT Model) 為基礎的健康管理流程來探討民眾使用體位控制 APP 黏著度之影響，並以臺北榮總體重控制門診為場域，進行行為影響之分析以達到體重控制的目標及模型之建立及驗證。

關鍵詞：體重控制門診、整合科技模型 (UTAUT Model)、績效預期、行為意向、整合性科技接受使用理論

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## Abstract

Each person's healthy weight varies with age, gender, and height. The World Health Organization (WHO) recommends using the Body Mass Index (BMI) to define healthy weight standards. For Chinese adults, a BMI value between 18.5 and 23 kg/m<sup>2</sup> is a healthy weight range. If the BMI is too high and more than 35, it is morbidly obese. For people who are severely obese or morbidly obese, they often lack psychological self-confidence, thus reducing many social and job opportunities; health, in addition to causing physical decline, may even cause diabetes, metabolic syndrome, dyslipidemia, hypertension Hyperuricemia (gout), osteoarthritis, coronary heart disease, breast cancer, endometrial cancer, colorectal cancer and other diseases. Among the top ten causes of death in the Chinese, eight causes of death are related to obesity.

Current research indicates that for weight control, face-to-face clinical outpatient intervention and technology application APP intervention, the integration of the two will be more effective than a single form. Another study pointed out that the app content of the mobile device for posture control pointed out that community influence also accounts for an important part. At present, there is no good theoretical model for posture control as a basis. However, there is an integrated technology model for medical self-service technology to improve the hospital service process. Our study is aimed to conducted the health management process of Healthy Weight-reduced clinic of Taipei General Veterans Hospital. We designed and verified as a new process of health management based on the technology integration model (UTAUT Model) while added the mobile application. The integrated technology model (UTAUT Model) was proposed by Venkatesh et al. In 2003. It integrates eight technology acceptance models, namely the rational behavior theory (TRA), technology acceptance model (TAM), and motivation model (Motivational Model, Referred to as MM), Theory of Planning Behavior (TPB), Combined Technology Acceptance Model and Theory of Planning Behavior (Comblined with TAM and TPB, referred to as C-TAM-TPB), Computer Usability Model (Model of PC Utilization (MPCU for short), Innovation Diffusion Theory (IDT) and Social Cognitive Theory (SCT) and other eight theoretical models are based on the integration of major factors to form a comprehensive model. The explanatory power of integrated theoretical model was more than 70% which beyond any theoretical model is high. The explanatory power of integrated theoretical model was constructed with variables include: performance expectaions, effort expectations, community influence, convenience conditions, behavioral intentions, behavior, gender, age, experience, voluntary use. This project will try to find out how to explore the impact of Healthy Weight-reduced APP use for health management processes based on the UTAUT Model of Taipei Veterans General Hospital Healthy Weight-reduced clinic as an example to do behavioral impact analysis to achieve the goal of weight control, and do the establishment and verification of the preliminary healthy Weight-reduced clinic process model.

Key Words: Weight-reduced clinic、Unified theory of acceptance & use of technology(UTAUT)、Performance expectations、Behavior intention、Integrated Technology Acceptance Theory