UNDERSTANDING FACTORS FOR MOBILE APPLICATIONS CONTINUANCE: EXTENDED EXPECTATION- CONFIRMATION MODEL IN THE CONTEXT OF CHRONIC DISEASES

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The CDC indicates that Chronic illnesses such as heart disease, cancer, stroke, diabetes, obesity, and arthritis are the leading causes of death and disability in the United States (CDC, 2017). In the healthcare sector, there is an ongoing debate about what can be done to address and prevent the growing trend of chronic diseases.

Scholars suggest that population-level policies and individual level interventions are needed to promote healthy lifestyles that mitigate the conditions leading to the development of chronic diseases (CDC, 2017). A review of the related literature suggests that important scholarly work has been conducted to understand the effects of policies on the promotion of lifestyles that could mitigate the risk factors leading to chronic diseases (Afshin et al., 2016). However, additional research is needed to evaluate the impact of individual-level measures using mobile IT through long period of times supporting preventive and corrective actions. Consequently, the purpose of this study will be to investigate what are some of the key factors that influence the continued use of mobile IT applications focusing on the improvement of lifestyle that prevents or mitigates the negative impact of chronic diseases.

In order to investigate the phenomena of interest, we use the extended expectation-confirmation model of continued IT usage (EECM-IT) (S. Hong, Thong, & Tam, 2006). EECM-IT is a theory that blends expectation-confirmation model of IS continuance (Bhattacherjee, 2001) with the technology acceptance model (Davis, 1989). ECM IT and TAM explain different aspects of continued IT use and consequently the EECM-IT delivers a more comprehensive understanding of continued mobile IT usage.
Since our study seeks to understand the continued use of mobile IT, in the context of preventing the negative impact of chronic diseases, we follow W. Hong, Chan, Thong, Chasalow, and Dhillon (2014) guidelines for contextualizing theory as a way to obtain richer insights from studies. As a result, we explore antecedents to confirmation of IT mobile applications such as performance expectancy factors and perceived quality factors (Shin, 2011) drawing from Hoehle and Venkatesh (2015) who developed an instrument to study mobile application usability.

The planned data collection for this study will be longitudinal following ECM, and TAM models studying IT continued usage (Bhattacherjee, 2001; Venkatesh & Davis, 2000). Patients' perspectives on mobile applications that promise improvements in their health would be better studied through a longitudinal study.

We expect to contribute by providing a more comprehensive understanding of why patients continue or stop using mobile applications that can support them with prevention or mitigation of chronic diseases. Practitioners, including physicians and medical organization staff in general, would be able to adapt their interactions with patients recovering from or avoiding chronic diseases.

Better understanding of factors that prolong mobile applications usage could bring benefits to multiple stakeholders including patients, health institutions, government agencies, and insurers.

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