A REVIEW ON USE OF SMART PHONE ON HEALTH MONITORING

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ABSTRACT

The rise in academics and healthcare providers' interest in using smartphone apps to delivery of behavioural therapies for health is continuous. While several health-related applications have been on the market, the study of how to design and evaluate them is still in their early phases. Several previous studies have sought to understand the different populations' perspectives on the usage of mobile phones for health-related purposes and more research is being done now to study the end-user feedback on individual applications. Yet, little has been studied in-depth on the positive and negative aspects of apps, and the unique characteristics and capabilities that they will or now possess. As a specific concern, there is a notable absence of study on young people, a population that includes a considerable proportion of mobile technology adopters. This research aims to investigate young individuals' views on applications connected to making changes in their health-related habits. It wanted the participants' experiences and viewpoints on various health behaviours and contributing concerns.

KEYWORDS: Smart Phone, Health, Monitoring, Technology

INTRODUCTION

Mobile phone use is fast expanding with estimates from 2011 and 2012 showing that around 35% of individuals in the United States and 39% of people in the United Kingdom use smartphones, with this trend continuing. Computationally powerful, sensor-rich, and connected with social networking; these ubiquitous gadgets are complicated, sophisticated, and data-rich. Academics and therapists are now exploring using cellphones as a way to offer behavioural therapies to the general public.

While cellphones provide several useful functions, they are excellent candidates for behavioural treatments. They tend to stay with the user all day long, therefore they're very portable gadgets that are very highly regarded. Their policies, then, allow behavioural treatments to be incorporated into critical real-life situations, where individuals have control over their health and experience obstacles to behavioural change. A second consideration is that smartphones may be a more economical, convenient, or less stigmatising solution than anything else available. Finally, since cellphones are interconnected, it is easier to exchange behavioural and health data with healthcare providers or peers. Furthermore, as smartphones have become increasingly capable of interpreting the context of the surrounding environment, such as the position and movement of the user, their level of engagement, and emotional state, the potential exists for continuous and automated tracking of behaviours and the prompt, individualised delivery of interventions based on context.

A wealth of academic literature has already been dedicated to telephone and SMS text messaging-delivered interventions. However, the advent of smartphone software programmes, apps, and third-party extensions have

dramatically impacted this space in the last few years. Other well-known applications include applications to help manage stress, improve mood, maintain good diets, remain physically active, stop smoking, and monitor health conditions. Apps focused on health often include capabilities for recording, reflecting, and providing guidance for users.

Although great excitement has been expressed about using smartphone applications to offer therapies, academic research in this area is in its early stages. There is also a need for formative research at this point, in order to get a better understanding of which categories of individuals are interested in utilising these types of applications and to investigate what variables may impact that interest.

USE OF SMART PHONE IN HEALTH MONITORING

A small number of qualitative research studies, performed on both healthy and chronically sick persons, have previously examined mobile phone usage and associated health outcomes with several populations. Thus far, preliminary findings showed that it was appropriate to use mobile phones for managing physical and mental health as well as for encouraging changes in health-related behaviour in many pilot projects. Fetchever, et al, carried out a feasibility study on an 8-user mobile intervention for depression. It used ecological momentary intervention and context sensing, and despite facing significant technological challenges, participants were pleased with the intervention. Another approach has focused on discovering certain application characteristics that are particularly helpful. A research was conducted in which fifteen individuals downloaded three different types of exercise applications for one week each. Following this, they conducted a quantitative review of the applications and qualitative interviews with users to get a deeper understanding of the overall design. A wide range of options to choose from, such automated activity monitoring, goal progress monitoring, music features, and easy-to-use features, were popular among app users. Additionally, within an intervention trial, an observational study documented experiences of 119 users while using three different apps (a wellness diary, a physical activity coach, and a relaxation assistant). This study explored their reasons for using these apps and uncovered impediments and motivators in their use.

From a study done in June of 2014, the research on smartphone app feasibility and acceptance has been generally favourable. However, past study has shown that only a superficial perspective of user opinions is obtained while exploring. With a little bit of in-depth qualitative research, consumers will be able to share what they experience, their viewpoints, and how they utilise the products. Previous study leaves some essential aspects of the problem mostly unaddressed. No relevant research exists that describes how young adults utilise behaviour-change applications. While young people are known to be early adopters of smartphone technology, few studies are available that examine the creation of treatments for this demographic. Recent papers have brought attention to the fact that not enough attention is paid to smartphone treatment for young people, and that they are an urgent demographic for several behavioural health concerns. The survey discovered that almost one in ten US adults downloaded health applications straight from the market (e.g. Apple App Store, Google Play). When it comes to Direct-to-Consumer (DTC) apps, the review data suggests that these apps are not developed by health care providers or academics, and do not leverage behaviour change theories or techniques. Furthermore, the data suggests that the content on these apps does not correspond to clinical guidelines for the condition or behaviour in question. However, given the scarcity of scholarly research on user perceptions and experiences of these applications, it may come as a surprise to

some users. The phone context-sensing technology has seen minimal research in the setting of health applications, although some individuals are concerned about privacy and security issues.

SMART PHONE AS A HEALTH RESOURCE

The most often reported and widely accepted way in which cell phones help people to adopt healthy habits is that they provide up-to-date and rapid information. Participants obtained information about health via their cellphones often, as well as information they got on the Internet. While looking for probable symptoms, participants said that they used their cellphones to search for healthy recipes to prepare at home, as well as information on particular workouts. For other individuals, the main reason for choosing multimedia information forms such as video or audio of a fitness teacher offering instructions on an activity was the option to learn more about new topics. Participants were excited about the prospect of mobile applications that provide information and assistance while they're on the road.

CONCLUSION

The findings of this research include a number of limitations that might impact the conclusions and suggestions derived from them. Also, since the sample was small, self-selected, and taken from a university population, results must be interpreted with caution. The device, as planned, provided an in-depth examination of the viewpoints of a specific age group who have not previously been an important focus of health app research. This age group is likely to own and use smartphones, and hence is open to exploring various health improvements. The survey sample may be different from that of other younger individuals, and although it is uncertain if the trends found here apply to other groups, This research had many shortcomings. One of them was that the conclusions and discoveries it unearthed either used memory of past app usage or conversations about hypothetical app usage.

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