Chapter 13
Giving Up Smoking Using SMS Messages on your Mobile Phone

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ABSTRACT

The current tendency to use cell phones or other mobile devices for healthcare purposes offers a huge opportunity to improve public health worldwide. In that direction, mobile devices make it easier to offer coaching services through text/video messages, to support individuals trying to break addictions such as smoking. Given that use of such services is still low in France and other countries, it is important to have greater understanding of what leads users to adopt them. Therefore, we propose and validate an explanatory model for the intention to adopt a mobile coaching service to help people to stop smoking. This chapter uses the concepts of vicarious innovativeness, social influence, perceived monetary value, perceived enjoyment, and perceived irritation.

INTRODUCTION

Addictions to tobacco, alcohol, drugs, over-eating, caffeine and pathological gambling are a serious problem for society. Breaking the habit takes enormous willpower, and in many cases the help of therapists or support groups. The rising popularity of smartphones, has led to a dramatic increase in mobile services through apps. The current tendency to use cell phones or other mobile devices for health offers a very interesting opportunity to improve public health worldwide (Stanford Social Innovation Review, 2011). One such service could provide support for giving up smoking. According to the report of PwC (2013), by 2017, mHealth has the potential to save 2.6 billion EUR by helping people quit smoking. This type of service is relatively new in France, hence the relevance of studying the profile of potential adopters.

In France, almost 66,000 deaths each year are directly attributable to smoking (5 million in the World), which is the primary cause of avoidable premature death, and the problem of nicotine addiction continues to grow despite efforts to curb it (INPES, 2007). Across the whole French population aged 15-75, the proportion of daily smokers rose from 26.9% to 28.7% between 2005 and 2010, and cigarette sales saw a slight upturn between 2008 and 2009 (from 53.6 billion to 55 billion packets) after dropping significantly between 2001 and 2004 (from 82.5 billion to 54.9 billion, due to substantial increases in the price of tobacco products). However the proportion of smokers that smoke more than ten cigarettes a day is diminishing. The French smokers are usually very young and represent 50% of the smoker people (about 94% of the smokers in EU start smoking before they turn 25). Considering 15 million of French smokers (more than 100 million in the world), more than half would like to stop smoking. Only 750 000 (5% of the smoker people) people stop smoking each year. More than 2 million of smokers used skin patches, nicotine substitute or pharmacological processing in 2010.

Tobacco companies are investing in a new generation of smokeless alternatives to cigarettes as the industry faces growing regulatory threats across the globe. The world's four biggest tobacco companies outside China –Philip Morris International, British American Tobacco, Japan Tobacco International and Imperial Tobacco – are positioning themselves for an increasingly smoke-free future as they seek to entice smokers to non-combustible substitutes such as electronic cigarettes, tobacco vaporizers and nicotine inhalers over the next decade (Wembridge & Thompson, 2012). Nevertheless, the benefits of electronic cigarettes are still controversial. Coaching people to avoid taking a cigarette or an e-cigarette seems to be a better option. According to PcW estimates, out of the 102 million smokers, 48.8 million can potentially use mHealth solutions regularly and 3.9 million smokers could quit smoking successfully.

Since January 2010, Health & Human Services (HHS) has invested $5 million dollars to develop its eHealth/mHealth smoking cessation resources aimed at increasing quitting attempts among teens, young adults and adults (Merill, 2011a).

This chapter concerns a mobile coaching service providing support for people trying to stop smoking. The service takes the form of short text messages (SMS or MMS) sent to cell phones to help individuals in a range of situations or anti-smoking activities. The principal objective of this study is to identify drivers fostering the intention to adopt such a service in the young smokers segment in France. The chapter is structured as follows. Firstly, the conceptual framework is presented and after that the model of the intention to adopt the mobile coaching service is introduced. The methodology is then described along with the operationalization of the underlying hypotheses. After reporting the main findings and managerial and social implications, the chapter concludes by considering limitations and avenues for future research.

CONCEPTUAL FRAMEWORK

The effectiveness of a mobile coaching service has already been tested in various countries, including New Zealand where a program to stop smoking was developed and tried out (Whittaker et al., 2008). But such mobile coaching services are relatively little used in France, and this is why they are considered as an innovation for the purposes of this study. Several definitions of an innovation have been proposed. The one used here is by Rogers (1962), who defines an innovation as an idea, practice or object perceived as new by the individual. Diffusion of an innovation is the process by which it is communicated through certain channels over time among the members of a social system (Rogers, 1962). Rogers identifies three factors that explain how an innovation spreads and is adopted: 1) the

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