Chapter 37

Psychological Traits, Addiction Symptoms, and Feature Usage as Predictors of Problematic Smartphone Use Among University Students in China

Louis Leung
The Chinese University of Hong Kong, Hong Kong

Jingwen Liang
The Chinese University of Hong Kong, Hong Kong

ABSTRACT

This study investigates the effects of psychological traits (i.e., procrastination, leisure boredom, and impulsivity) and addiction symptoms on problematic smartphone use. Data were collected from a multistage random sample of 649 university students. The results showed that procrastination, impulsivity [including sensation seeking and (lack of) perseverance], symptoms of addiction (e.g., inability to control craving, withdrawal, and complaints), and frequent usage of smartphone features for instrumental, relational, expressive, and informational purposes were significant predictors of problematic smartphone use.

INTRODUCTION

New mobile technologies have influenced the daily lives of their users. According to a study conducted by the Pew Internet and American Life Project in 2015, nearly two-thirds of adults in the US own a smartphone, which is an increase of 35% since 2011 (Smith, 2015). The study revealed that although talking, texting, emailing, and going online were the primary applications, three-quarters of smartphone owners reported using their smartphones for social media, 60% took pictures or a video, about 50% watched videos, 47% played online games, and 41% consulted maps. It is also interesting to note that about 46% of smartphone owners reported that their smartphone is something "they couldn't live with-

out." Today, mobile phones are indispensable and their use is widespread in Chinese society. According to the Ministry of Industry and Information Technology (2014) of the People's Republic of China, the adoption rate of mobile phones in Mainland China was 94.5%, and about 85.8% of netizens were connected to Internet service via their advanced mobile devices (CNNIC, 2015). Similarly, according to the Office of the Communications Authority (2015), mobile subscribers in Hong Kong were 227.9% of the entire population, which indicated that many citizens had more than one mobile phone. Among these subscribers, 85.52% were smartphone users (including 2.5G, 3G, and 4G).

According to Smith (2015), young adults, the affluent, and the well-educated are among the most likely to own a smartphone, and they are the most active users of smartphones. There are many reasons for this phenomenon. First, young people generally are receptive of new technology (e.g., Charness & Bosman, 1992). Moreover, the young generation has a strong need to use new technology to extend their social domains because they are starting to build their identities and establish relations outside their families (e.g., Lanthier & Windham, 2004). However, the relative lack of mature self-regulation and insufficient information may result in the risk for addictive smartphone use among young adults (e.g., Chiu, 2014; Leung & Lee, 2012). Previous research has consistently found that compared with other life stages, adolescence is characterized by the heightened potential for recklessness, sensation seeking, impulsiveness, and risk-taking behaviors, which have been implicated in drug use and delinquency (Arnett, 1992). As the penetration rate of smartphone continues to increase, the negative outcomes of the problematic use of this media technology have attracted attention in the field of addiction research. For instance, previous studies have revealed key symptoms of mobile phone addiction in young people (Leung, 2008), and measurement scales have been created in the Western context (e.g., Bianchi & Phillips, 2005). However, in Asian countries, systematic investigations of this new media addiction are relatively scarce.

With the aim of providing empirical evidence to fill this gap in the research, a survey was conducted in China to determine the typical components of smartphone addiction symptoms among Chinese university students. Because of the limited amount of research in this area, theoretical constructs in psychology, such as procrastination, leisure boredom, and impulsivity, were used to explain addiction symptoms and problematic smartphone use. By linking problematic smartphone use in daily circumstances to potential predictors, this study gained new insights into understanding how psychological traits, symptoms of addiction, and patterns of smartphone feature usage influence the lives of young people (Burnay, Billieux, Blairy, & Larøi, 2015). As shown in Figure 1, this study focuses on the impact of procrastination, leisure boredom, and impulsivity (including urgency, premeditation, perseverance, and sensation seeking), as well as the symptoms of addiction on problematic smartphone use.

PROBLEMATIC SMARTPHONE USE

A study conducted by the Pew Research Center found that 52% of adolescents in the US aged 16 and 17 years who owned mobile phones said they had talked on a mobile phone while driving (Madden & Lenhart, 2009). Previous research also found that the adopters of mobile phones blurred public and private behaviors in public spaces and talked loudly at formal meetings, libraries, and crowded buses/trains, concert halls, and theatres (Wei & Leung, 1999). Technological advances and the miniaturization of the smartphone have made it easier for users to capture their voyeuristic fantasies on camera. Recently, increasing numbers of "upskirting" (i.e., images of the view up a woman's skirt) and "downblousing" (i.e., images of the view down a woman's blouse) incidents have been reported in the news

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/psychological-traits-addiction-symptoms-and-feature-usage-as-predictors-of-problematic-smartphone-use-among-university-students-in-china/228885

Related Content

Using Social Media in Creating and Implementing Educational Practices
Robyn Gandelland Inna P. Piven (2023). *Research Anthology on Applying Social Networking Strategies to Classrooms and Libraries (pp. 526-544).*
www.irma-international.org/chapter/using-social-media-in-creating-and-implementing-educational-practices/312940

An Abstract Framework for Modeling Argumentation in Virtual Communities
Tudor Groza, Siegfried Handschuh, John G. Breslinand Stefan Decker (2009). *International Journal of Virtual Communities and Social Networking (pp. 37-49).*
www.irma-international.org/article/abstract-framework-modeling-argumentation-virtual/34094

Social Information Seeking in Digital Libraries
George Buchananand Annika Hinze (2008). *Social Information Retrieval Systems: Emerging Technologies and Applications for Searching the Web Effectively (pp. 209-229).*
www.irma-international.org/chapter/social-information-seeking-digital-libraries/29162

Incentivizing High-Quality Reviews in Peer-to-Peer Settings: A Feasibility Study with Student Assignments
J.Z. Yue, K. Böhmand S. von Stackelberg (2014). *International Journal of Virtual Communities and Social Networking (pp. 1-21).*
www.irma-international.org/article/incentivizing-high-quality-reviews-in-peer-to-peer-settings/116009

Impact of Information Technology on Lifestyle: A Literature Review and Classification
Payam Hanafizadeh, Samira Ghandchiand Masoud Asgarimehr (2017). *International Journal of Virtual Communities and Social Networking (pp. 1-23).*
www.irma-international.org/article/impact-of-information-technology-on-lifestyle/182729