### ARTICLE IN PRESS

Telematics and Informatics xxx (xxxx) xxx-xxx

FISEVIER

Contents lists available at ScienceDirect

### Telematics and Informatics

journal homepage: www.elsevier.com/locate/tele



## Compulsive smartphone usage and users' ill-being among young Indians: Does personality matter?

Abinash Panda<sup>a</sup>, Nikunj Kumar Jain<sup>b,\*</sup>

#### ARTICLE INFO

### Keywords: Personality theory Five factor model personality emotional illbeing Physical ill-being India Compulsive smartphone usage

#### ABSTRACT

Personality characteristics are found to have significant influence on the extent of smartphone usage among the Indian youth. Compulsive usage of smartphones, however, affects the users' emotional and physical health. The objective of this study is to examine how personality characteristics are related to compulsive smartphone usage and if compulsive smartphone usage impacts users' ill being. Personality characteristics such as extraversion and conscientiousness are found to be leading to the compulsive smartphone usage, whereas neuroticism, openness to new experience, and agreeableness are found to be negatively influencing compulsive smartphone usage. Extraversion is found to have maximum influence on an individual's compulsive tendency to use smartphone, followed by conscientiousness. The findings of this study also made the authors believe that compulsive smartphone usage, affects both emotional (affecting inter-personal and family relationships) and physical (lack of quality sleep and physical discomfort) health of the smartphone users. Emotional health, however, is found to be more affected by compulsive smartphone usage compared to physical health. Given these findings, it is desirable that youths in Indian should be appropriately guided to use smartphones judiciously so that they do not end up being the victims of compulsive usage and subsequently addiction.

### 1. Introduction

The smartphone is a device that is mobile with multiple utilities. It allows an individual to use it as a telephone, a computer with the Internet facility and significant computing capacity (Tossell et al., 2012). Hence, everyone desires to have a smartphone, irrespective of social stature and professional affiliations (Lin et al., 2015). Smartphones, compared to conventional mobile phones, offer more varied options of engagement because of internet connectivity, computing capabilities, and entertainment features, which act as inducements for individuals to get addicted to a smartphone. Individuals tend to use smartphones more frequently or excessively (Oulasvirta et al., 2012), even while engaged in other worthwhile activities such as studying, attending classes or meetings. Such behavioural patterns frequently contribute to one's stress and anxiety. Such anxiety and stress may not allow them to rest their mind and relax (Collins and Koechlin, 2012). All these seem to contribute to negative effects on the physical and emotional well-being of users.

Smartphone has gained significant popularity in recent times (Chen et al., 2017). Ericsson (2016) has pegged global smartphone subscription at 2.6 billion. The growth in smartphone usage has plateaued in advanced economies, such as the United States (U.S.) and Europe. The report has also indicated that by 2020, the number of smartphone users would be 6.1 billion globally, which

E-mail addresses: abinash.panda@mdi.ac.in (A. Panda), nikunj.jain@imi.edu (N.K. Jain).

https://doi.org/10.1016/j.tele.2018.03.006

Received 20 December 2017; Received in revised form 22 January 2018; Accepted 6 March 2018 0736-5853/ © 2018 Published by Elsevier Ltd.

a Organizational Behaviour Area, Management Development Institute, Gurgaon, India

<sup>&</sup>lt;sup>b</sup> Operations and Quantitative Methods Area, International Management Institute, New Delhi, India

<sup>\*</sup> Corresponding author.

A. Panda. N.K. Jain

constitute almost 70 per cent of the world's population. The less mature markets would lead the list of fastest growing markets. By that time, the number of smartphones may overtake the aggregate number of active, fixed line subscriptions worldwide.

Ericsson (2016) has also estimated that 80 percent of new subscriptions in the next five years will be from the Asian Pacific, the Middle East, and Africa regions. The top five countries by net additions of smartphones were India, China, Myanmar, Indonesia, and Japan during the first Quarter of 2015.

Counterpoint Research's (2016) survey found that the smartphone shipments in India grew annually at 23% Q1 2016 compared to the global growth. Their survey also reported that smartphone usage in India has crossed 220 million users making it the second largest smartphone market surpassing U.S.

According to Ericsson (2015), 80 per cent of the smartphone users in India are under 25 years of age. Increase in disposable income, fast lifestyle, and the need to stay connected seem to be pushing individuals in this age group to use smartphones as a gateway to their digital lives.

India has emerged as the second largest market of smartphone users (Counterpoint Research, 2016). Most active users of the Internet and technology based gadgets are aged between 18 and 30 years (IAMAI, 2015). Smartphones are used by youth for various purposes like social networking, chats, personal and professional communication (Counterpoint Research, 2016; Ericsson, 2015; IAMAI, 2015). India has become a pivotal nation of interest for academic researchers to examine how the use of hi-tech gadgets on individuals, particularly young adults affect their behaviour. Enez Darcin et al. (2016) have noted that most studies addressing the compulsive and addictive usage of smartphone are confined to East Asian countries such as Korea, China and Japan, and thus missing out India. The usage of smartphone is increasing thick and fast amongst the Indian youth, and hence, there is a felt need to undertake study of the behaviour of Indian youth with respect to technostress and addiction to hi-tech gadgets.

Further, findings of a few earlier studies have indicated that certain personality characteristics are related to compulsive mobile phone usage (Lee et al., 2016). Moreover, the popularity of smartphone usage amongst the students is evident from the findings of many studies. For instance, Veletsianos and Navarrete (2012) have reported that students desire to leverage online social media for learning purposes. Online social media complements and enriches the learning experiences of students. Social media tools are a must in e-learning courses. Students use these tools for enhancing the convenience and efficacy of communication amongst their peer groups (Brady et al., 2010).

Students in higher education institutions are more open about using Facebook and other similar technologies to supplement (Roblyer et al., 2010). Students also prefer getting information through online social media such as Facebook and e-mail instead of traditional person-to-person interactions.

Yu et al. (2010) found that social networking engagement on Facebook has positive impacts on students' learning. It also helps them in connecting with and gaining acceptance among their peers. Facebook also makes students more self-efficient and independent, thus enhancing their self-efficacy (Bowers-Campbell, 2008), besides promoting independent learning by enhancing and enriching communication with course-facilitators and peer groups. Hence, probably, smartphone usage, may be viewed positively by the students of Higher Education Institutions.

Though smartphones offer a lot of benefits to the users, excessive or compulsive usage of smartphone, however, can have negative effects. Individuals may become anxious if they cannot access online social platforms or suffer from physical discomforts such as headaches from excessive usage (Khan, 2008). In a few extreme cases, excessive usage may lead to emotional and mental problems, uncomfortable and disturbed sleep. Compulsive smartphone usage may also accentuate psychological and biological stress (Lee et al., 2016).

Scholars have mostly explored the relationship between personality attributes and the usage of technology and web services (e.g. Tan and Yang, 2014; Tang et al., 2016). Interestingly, however, there are not many studies, which have concurrently examined the influence of various personality traits on the extent of usage of smartphone and the impacts of excessive smartphone usage on users' emotional and physical health.

The increased usage of smartphone amongst the young population in India in recent times has made this group vulnerable to technostress. Hence, there is a need to investigate the pattern of usage of smartphone, antecedents and consequences of smartphone usage amongst the Indian youth. However, barring a few (e.g. Nithya and Julius, 2007), there is hardly any study that explores the antecedents and consequences of smartphone usage amongst the young population in India.

Given that there are not many studies, the first goal is to examine the impact of personality traits on the pattern of compulsive usage of smartphone. This study has relied on five-factor personality assessment model. The five aspects of the personality traits are conscientiousness, extraversion, neuroticism, openness and agreeableness. The second goal of this empirical study is to examine if and how compulsive usage of smartphone impacts the physical and emotional ill-being of the Indian youth.

The study is intended to make several contributions. First, given its practical utility and research significance, this study contributes to the emerging inter-disciplinary domain of IT and Human Behaviour. Secondly, this study attempts to unravel how compulsive smartphone usage impacts the emotional and physical health of the users. This paper is organized in seven sections. Section 2, following the current section proposes the conceptual framework along with hypotheses. Section 3 presents the methodology of this study. Section 4 presents the findings of data analysis. Section 5 discusses and synthesizes the findings in the study context. This section also presents the implications. Section 6 presents the limitations of the study in brief. The last section summarizes the conclusions and presents the scope for future research.

# دريافت فورى ب متن كامل مقاله

### ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
  - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
    - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات