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# "Impact of Smartphone: A Review on Negative Effects on Students"

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## ABSTRACT

In the present scenario, the use of smart phone among students is seen as a vital part of their life because of its advanced applications and features. Students use their Smartphones for learning and fun related activities. Reviews from previous studies revealed that students utilize smart phones for various objectives. Many students utilize smart phones for entertainment, education, and other social purposes. This research paper aims to review relevant literature on smart phone usages among students and also identify the negative effect of smart phone on students by focusing on social aspect and psychology education. Therefore, the review of this study is crucial in providing the outcome of smart phone use is negatively effecting student's day today routine life. This information is important for researchers to conduct further studies in this field.

### Introduction:-

According to latest research, more than one billion people worldwide own at least one of these phones and they use it for downloading software's, application, news, games, checking email, surfing the web, and listening to music, watching movies and other relevant and irrelevant information. These advanced technologies are growing day by day. Everyday new application is developed for users.

The use of Smartphone's for youth have been described as addictive technologies. In day's date youth are very much addicted of Smartphone's. A latest survey has shown that youth would give up wearing shoes, brushing their teeth, exercising showering instead of living without their Smartphone's for the same period of time.

Researchers agreed that mobile phone addiction is actually problematic for everyone especially young people who are studying in schools, colleges and universities, preparing for competition.

The Smart phones came in 1993 when Apple introduced the smart phone in a consumer market. The major difference between today's smart phones and early phones is that early phone were used by corporate and now you can buy smart phone at a very cheapest rate. The purpose of this research paper is to explore the negative impacts of youth health regarding uses of this technology.

The fast growth of technology has developed electronic device such as smartphone that the function do not limited only for messaging but this device allow long distance communication. Smartphone can be called as minicomputer as the features and functions provided are like computer in its mini form and its handy (Rambitan, 2015). The smartphone era began in 1993 with the introduction of Simon smartphone from IBM (Sarwar & Soomro, 2013).

Smartphone revolution era began with introduction of blackberry smartphone in mass communication market equipped with many features such as web browsing, camera, email and internet. Apple entered the market in 2007 and became a major breakthrough in the market as the company introduces its first smartphone.

By the end of 2007, android operating system by Google was revealed to public in aim to approach smartphone consumer with advanced technology. There are differences between the previous version and current version of smartphone as the earlier version was more highly utilized as a tool in companies and was too expensive to be introduced to public users. As the technology progress during that era was slow and unaffordable by all, therefore the mobile phone users were limited. Essentially, mobile phone were produced in afford to simplify adult's job.

However, as time passes youth became fascinated with this device. Smartphone offers many functions but youth are more attracted in chatting and searching for new mates through the medium of social media and even like to exchange pictures which seem to be unrelated to their learning. Smartphone seems to be the first thing users look for in the morning and the last things they look at before they sleep (Lee et al., 2014). Smartphone is a mobile phone that has the ability of a computer. This device provides user with advance communication and computing ability than the traditional mobile phone which equipped with internet access, cameras with high quality, and management tools (Boulos et al., 2011).

Latest smartphones are viewed as handheld computers rather than a normal phone because of its powerful computing ability and large memory. The capability of running feature-rich application (apps) on smartphones made smartphone a more powerful device replacing many devices such as alarms clocks, calculators, laptops, GPS navigators and digital cameras (Miller 2012).

**Literature Review**
Smartphone has made the young generation to be so occupied with its technology that it became a trademark of the young generation (Skierkowski & Wood, 2011). This situation can be observe clearly as the technology savvy generation are so dependable on the advance touchscreen technology where just by a touch the application on smartphone can be used at any moment with accessibility of internet all a day long.

Furthermore, smartphone had almost changed the style of interaction between human being with this advance technology. The global use of smartphone affect the people and societies in various forms as it is used in various context such as for learning, working, and communication. Smartphone has made life more convenient with multiple features that can help users to manage most of their daily life work just by a click. It enables users to communicate faster and easier and obtain variety information through online resources.

## 2.1 Impact of Smartphone on Education

Teaching and learning in higher education over the past few decades has incorporated information and communication technology (ICT) as it is seen as a crucial component to be adapted in the development of social environment (Rung et al., 2014). The most popular trend in term of ICT use can been seen by the growth of dependency on mobile-connected devices as it is not limited for daily tasks but also been utilized in educational environments (Koszalka & Ntloedibe-Kuswani, 2010).

Educational activities that incorporate smartphone use are accessing of course content, inspiring sharing and discussion session between teachers and students and retrieving information regarding students' performances (Cochrane, 2010). Therefore, smartphone use may lead to important influence in enhancing students' performance as this device might boost teaching and learning experience. Woodcock et al. (2012) stated that various area of students' lives would change by increasing smartphone use as students begin to utilize this device to increase their learning knowledge.

Smartphones use in learning context can further lead students to be aware of the benefits they might encounter such as are able to learn anything at anywhere and anytime as well as encourage students to involve in learning activities. This shows that technology able to open and increase student's prospect especially in their academic. Froese et al. (2012) conducted a self-report survey to investigate students' mobile phone activity in classes and the potential effect of the activities on students learning performance.

The result indicates that the use of mobile phone distracts students learning process and students believe that their classroom learning is disrupted during texting. Another study conducted by Tindell and Bohlander (2012) to understand the use and misuse of smartphone in college lecture setting. The finding shows that students are not paying attention to their class lecturer as they are spending too much time on texting.

Study conducted by Elder (2013) shows that student who used mobile phone in class score lower than students who did not use mobile phone and they even not able to recall much information from the lecture. Alfawareh and Jusoh (2014) study revealed that students do not fully utilize smartphones for learning motive but utilize it to make calls, taking pictures and browsing internet.

Furthermore, Hanson et al. (2011) stated that students prefer to use instant messaging, email and web-surfing in library rather than looking into library online resources. Moreover, students have difficulty in balancing their study life with their need for social support although they want to make their learning as a priority. Students seem to be motivated on updating their status on Facebook ass.ccsenet.org

Asian Social Science Vol. 14, No. 11 2018 85 rather than downloading their class assignment. Smartphone has impacted students life in various areas especially education, Smartphone use for education purposes introduce students to world of knowledge as students are able to obtain various information by a click.

Smartphone equipped with internet enabled feature provide students the ability to be connected always and is easier for them to obtain academic related materials online anytime. Sarwar and Soomro (2013) stated the positive impact of smartphones in education context, it enables society to access various learning resources and provide opportunities for individuals to continue their education by distance learning.

However, utilizing the smartphone for a long period or continuously might affect a person health; the person might experience headache and frequent messages and calls lead to interruption on students concentration and focus on completing their coursework which will effect negatively on their academic (Abu-Shanab, 2015). Study by Samaha and Hawi (2016) reported that the risk of smartphone addiction can be associated to life satisfaction via academic performance and perceived stress. It shows that students that achieve low academic performance will likely experience less life satisfaction and more likely prone to smartphone addiction.

## 2.2 Impact of Smartphone on Psychological Health

Problematic smartphone use might lead to development of certain behavioral and mental problems. The attachment that youth in this era has with their smartphone made them to feel they cannot live without their smartphone around them. Students tend to surf internet and play online games as way to release their mental stress from the stress that they experience in term to escape from problems that they face from their friends or their school work (Kim, 2013).

Students in the pass depend on computer to surf internet to cope with their stress problem however in today's society, students tend to depend more on smartphone due to the easy accessibility of internet. Study by Kibona and Mgaya (2015) shows that most of the students utilize smartphone for social activities (65%) compared to education activities (20%). Moreover, 65 percent of the students agreed that they utilize smartphone to surf social networking sites (Twitter, Whatsapp, Instagram, facebook) while doing their academic assignment. 48 percent of them spent around 5 to 7 hours per day on smartphone. This study further identified 85 percent of the students are addicted to their smartphones.

Study conducted on smartphone users revealed that users that overuse smartphone experience higher level of depression, trait anxiety and state anxiety compare to normal smartphone users (Hwang et al., 2012). Berger (2013) study shows that students who utilize mobile phone more tend to achieve lower grades and have higher anxiety and felt less happy than students who do not utilize mobile phone frequently. Study by Smith (2013) had also shown that students tend to have high anxiety and their GPA was low when they tend to use their phone more. The students mention that they had anxiety when they had to be away from their phone for certain amount of time as they are dependent on their phone. The increasing frequency and time spend (Lee et al., 2014) beside of dependency on smartphone among youth can be seen as an indicator of development of smartphone use from a habit to an addiction (Roberts et al., 2014).

## 2.3 Impact of Smartphone on Social Interaction

Communication plays a crucial part of human life. This indicates technology changing rapidly to match human necessities. In the modern society, communication becomes easier with the development of technology and it influences the style of communication between individuals. The unique and multiple application features of smartphones make it different from other phones. However, social engagement between individuals is jeopardized with its unique application by limiting their face to face interaction and develops more chat rooms communication.

It might cause lack of real life social interaction that contribute to relationship issues to arise, and interference in students' academic work (Kuss & Griffiths, 2011). Society is moving towards smartphone world, therefore obviously it can be seen that individuals are investing most of their time on the screen chatting and engaging in social media than meeting face to face with their friends and families. Although the application of smartphones increases the ability to interact with social mates easily and freely but it poses danger on relationship between human.

Even though individuals are able to create groups of friends and communicate through various social platforms, but oral communication is seen to be lack. The finding based on study conducted to investigate the relationship between the qualities of in person social ass.ccsenet.org Asian Social Science Vol. 14, No. 11 2018 86 interaction with the presence of mobile devices shows that conversations without mobile devices were significantly superior compared with interaction with presence of mobile communication technologies (Misra et al., 2014).

Lower levels of empathy concern were reported when communication did in presence of mobile devices while higher level of empathy is seen in individuals who communicate in absence of mobile devices (Misra et al., 2014). Another study conducted on the influences of mobile communication technology presence on the quality of human face to face interaction shows that used of mobile devices cause negative effects on individuals' conversation quality, closeness and connection especially noticeable during conversation related to personally meaningful topics (Przybylski & Weinstein, 2012).

## Study in India on Smartphone Use

Smartphone use is booming in India and is quickly becoming the dominant way many of the country's 900 million mobile phone users stay connected while they're on the go. Looking at recent trends, the country may have as many as 40 million of these devices in use by early this year. The dramatic growth is being driven by a desire among users to stay connected and have instant access to social networking sites - a global trend that represents an exponential growth opportunity in developing countries like India.
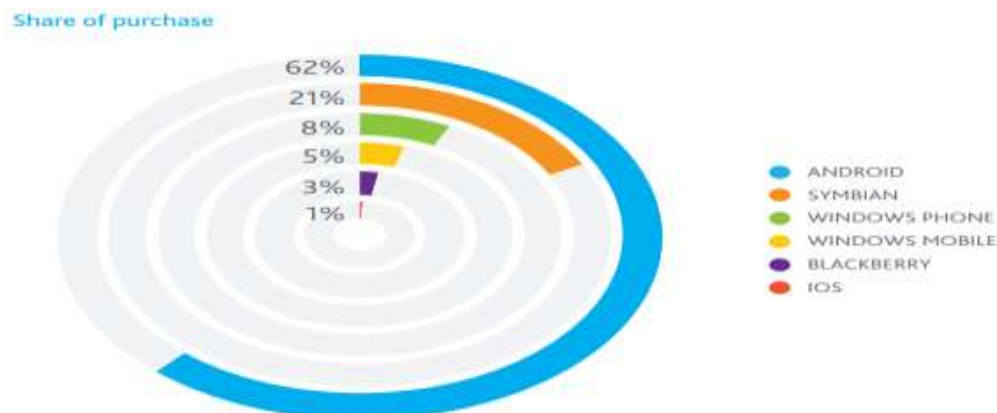
**Source- Nielson Informate Mobile Insights**

Decreasing device and data costs, coupled with a wide range of features that today's smartphones offer, are also readily encouraging consumers to trade in their traditional cell phones for handsets with much more functionality. To gain a sense of how this new breed of smartphone user is staying connected, Nielsen Informate Mobile Insights, an alliance between Nielsen and Informate Mobile Intelligence, polled more than 10,000 consumers in September and October 2012 across 46 cities in India to assess overall usage and device preferences.

Android leads the pack The Indian Smartphone User study found that 93 percent of smartphone users own only one handset, making it their single source of infotainment on the go. The Nielsen Informate Mobile Insights data revealed that smartphone users in India overwhelmingly prefer mobile devices that operate on the Android operating system.
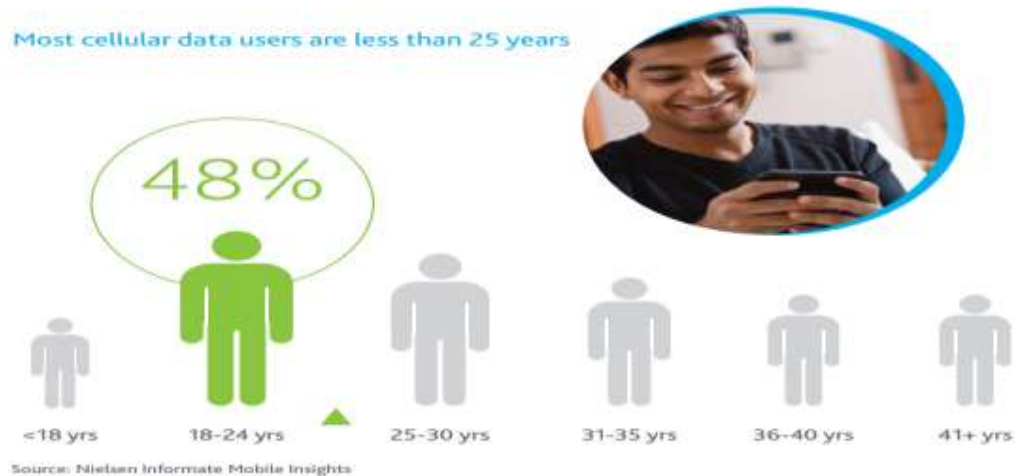


**Source- Nielson Informate Mobile Insights**

On studying the share of purchases among operating systems, Nielsen Informate Mobile Insights found that three out of five consumers, who recently bought a smartphone, preferred Android device - a preference that highlights Indian consumers' desire for a platform that is open and available across multiple brands and prices. While Symbian usage is also high in India, Windows, BlackBerry and iOS devices each only have single-digit figures when it comes to share of purchase.

**Game apps most popular**

Not surprisingly, the study found that voice and text communication via smartphone is declining. In fact, voice calls and texting accounted for only 25 percent of smartphone usage; multimedia, games, apps and internet browsing made up the rest. Among those who purchased smartphone apps, nearly three out of five users (58%) paid for games making it the most popular paid category. Other popular paid app

categories among smartphone users include chat and instant messaging (53%) and streaming music (45%).



**Source- Nielson Informate Mobile Insights**

**Mobile internet access: Room for growth**

Mobile internet connectivity and smartphone usage go hand-in-hand, but only half of the smartphone users polled have active data access. While this percentage may be significantly higher than the mobile data penetration for feature phone users, it indicates that millions of smartphone users still don't have access to mobile internet connectivity. It is interesting to note that the youth are quick to adopt internet connectivity on their smartphones with over half of all data users falling in the sub-25 year bracket.

Looking at recent trends, it is clear that India offers a significant opportunity for smartphone makers, application developers and content providers. With only about 40 million smartphones in play at the start of 2013, it is a market that is set to grow exponentially. The Indian Smartphone User study also suggests that consumers will continue to gravitate toward open and flexible operating systems to facilitate their preference for mobile gaming, chat and streaming music applications.

**Conclusions** –

The research on smartphone usage in the Indian context are still limited as can be seen from the review above there are only few studies on smartphone use been conducted among the Indian students. Past studies in India focus on investigating the duration of time students spent on smartphones, activities done on smartphones and identifying students that at risk of developing addiction behavior. However, research on investigating and understanding different aspect of smartphone use among the students such as psychological impact or social impact of smartphone use on their lives are still lacking.

Although studies had been conducted on the impact of smartphone use on students psychological or social life in many other countries (Kuss & Griffiths 2011; Przybylski & Weinstein, 2012; Hwang et al., 2012; Berger, 2013; Smith, 2013) but the culture and usage pattern of students in India might differ therefore the impact on students might be different. Moreover, research on problematic smartphone use among the Indian student population has never been explored from various aspects. The main purpose of this review is to identify the motive of students in utilizing

their smartphones; and negative effect of smartphone use on student's life in term of their psychological health, education, and socialization. Furthermore, to review on previous studies on smartphone used conducted in India. The finding of this research paper would help the researcher to identify the negative impact of smartphone that can influence student's life. Furthermore, the finding could encourage researchers in this field to investigate method to overcome the negative effects that students might face if they overused their smartphone in their routine life.

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