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# A Study on Impact of Smart Phone Usage on Health of College Going Students

**Sebin Sebastian**

Rajiv Gandhi Institute of Technology  
Government Engineering College, Kottayam, Kerala, India

**Jinesh .N**

Assistant Professor in Mechanical Engineering  
Rajiv Gandhi Institute of Technology (RIT), Kottayam  
Government Engineering College, Kottayam, Kerala, India

## ABSTRACT

*Smart phones have become one of the most influential technologies in people's life and for the past several years, have played an influential role in everyday communication. But with the overuse of smart phones, plenty of problems have aroused. Excessive use of smartphones can adversely affect our physical & psychological health. It can lead to sleeping disorders, eye problems etc. Some of the new syndromes caused by smart phone over usage are: text neck, nomophobia, phantom pocket vibration syndrome or ringxiety etc to name a few. This study aims to find out the impact of excessive use of smart phone on health of college going students.*

**Keywords:** *Smart phones, excessive use, health issues etc.*

## INTRODUCTION

In recent times, smart phones have become an integral part of our lives and made our lives much smarter and more efficient. The smart phone combines different sophisticated features. It allows users to keep pictures, memories, personal information, correspondence, health and financial data in one place. Smart phones also became an integral part of modern telecommunications facilities. The phones allow people to maintain continuous communication without interruption of their movements and distances. Smart phones combine advanced computing capability, such as internet communication, information retrieval, video, e-commerce and other features, that makes the device one of the basic necessities for many people. But the excessive use of smart phones can have adverse effect in our life. It can adversely affect our physical & psychological health. It can lead to neck pain, finger pain, wrist pain, sleeping disorders, eye problems etc. Some of the new syndromes caused by smart phone over usage are: nomophobia, phantom pocket vibration syndrome or ringxiety etc to name a few. The major outcomes of psychological health issues caused by excessive smart phone usage are anxiety, depression, fear, stress etc.

## LITERATURE REVIEW

For the past several years, smart phones had played an influential role in everyday communication (Park, 2005). Currently, mobile phones are known as an important part of adolescents' life and have rapidly become popular among the younger generations (Hakoama 2011). Nowadays, mobile phone not only is known as a communication tool but also has found various functions in the psychological and social aspects. In addition, mobile phone use has succeeded to change the social networks and may alter methods of human's interaction (Walsh and White, 2006). The negative physical and biological consequences of the excessive smart phone use cannot be ignored. Headache, sleep disorders, loneliness, reduced social interaction, anxiety, increased likelihood of driving accidents, low academic performance, occupational and legal issues, and financial

problems have been reported as negative effects of the excessive smart phone use (McEvoy *et al.*, 2005). A large number of people have expressed dependency on their mobile phones (Walsh and White, 2006) as it has become a life necessity. In relation to mobile phone addiction, adolescents tend to become uncomfortable and angry if and when their access to mobile phone is limited (Lee, 2002), and demonstrate compulsiveness in carrying the device at all times (Hooper and Zhou, 2007). Additionally, there are people who check their mobile phones continuously and think about them a lot even when they do not use the device.

Media use has become so much a part of young adults' lives that many do not realize their level of dependence and/or addiction to their cell phones (Roberts *et al.* 2014). When considering specific Internet-based activities, social networking (e.g., Face book, MySpace, and Twitter) has become extremely popular in recent years, and several studies have identified a negative relationship between social-networking site (SNS) use and academic performance.

Today, psychosomatic syndromes are emerging in mobile phone users who are frequently checking their phones when their phones are in "silent/not ringing" or "vibrated" modes (Hemmert,2008). As such, an intermittently perceived hallucination is defined as phantom vibration syndrome (PVS) or vibranxiety' and Phantom Ringing Syndrome (PRS) or ringxiety, respectively in mobile phone users who feel that their mobile phones are vibrating or ringing when indeed it is not the case (Rosenberger, 2015). PVS and PRS are common forms of hallucination in the general population, especially in teenagers and adolescents (Lin *et al.*, 2013).

There is extensive evidence demonstrating the impact of excessive calling, texting, Internet use, gaming, social networking and emailing on mental health. However, to date, no study has investigated the mental health impact afforded by being able to complete all of these functions on one portable smart-device. Whether high use or high involvement has positive or negative effects, smart-devices appear to encourage high use and involvement (Ofcom Report, 2011) and therefore the consequences need to be investigated.

## OBJECTIVES

The objectives of this study are:

1. To find out different factors leading to excessive use of smart phones.
2. To find out the impact of excessive use of smart phone on health of college going students.

## METHODOLOGY

Questionnaire was prepared based on the literature review. The scope of this study is limited to college students of age 17-25 & from 10 engineering colleges in Kottayam district, Kerala. Population size is 13,500 students and using Krejcie's & Morgan's table for finite population, 380 random samples were selected. Sample consisted of 196 males & 184 female respondents. Questionnaire survey was done among the selected sample. Collected data was analyzed using SPSS software. Descriptive statistics is used to analyze the data.

## RESULTS & DISCUSSIONS

The different factors leading to excessive use of smart phones were found out from the literature review. They are:

- (1) Calling (calls received & made)
- (2) Messaging (messages received & sent), and
- (3) Other purposes which includes:
  - Gaming.
  - Video Streaming.
  - Social Networking Sites.
  - Camera.

-Internet search for information

-Other Applications etc.

The different physical & psychological health issues caused by excessive use of smart phones were studied.

### PHYSICAL HEALTH ISSUES

#### Neck pain, discomfort or numbness

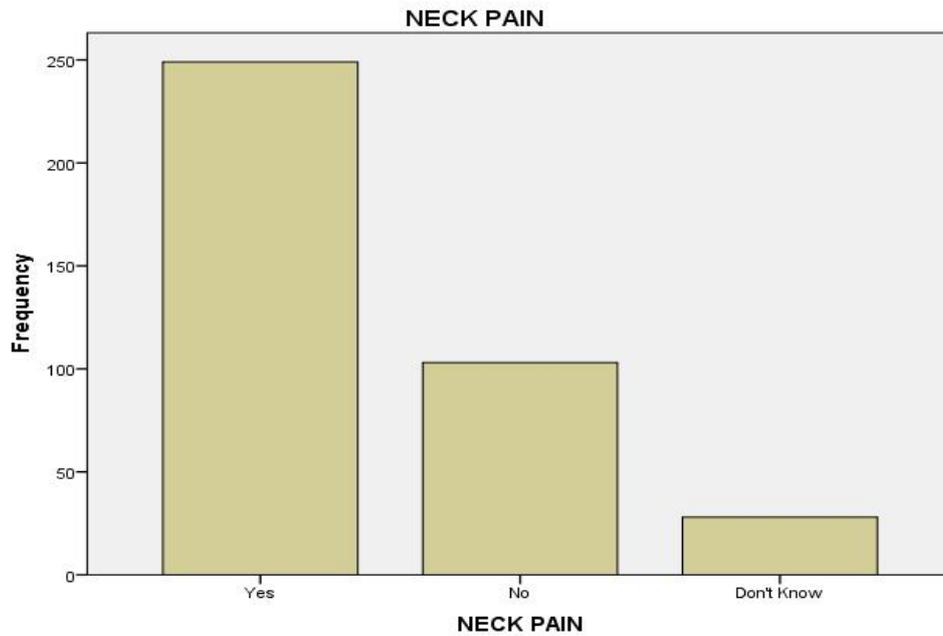


Figure 1: Neck pain

Out of 380 respondents, 65.5 % said they had experienced neck pain, 27.1% said no & 7.4 % said they don't know.

#### Wrist pain ,discomfort or numbness

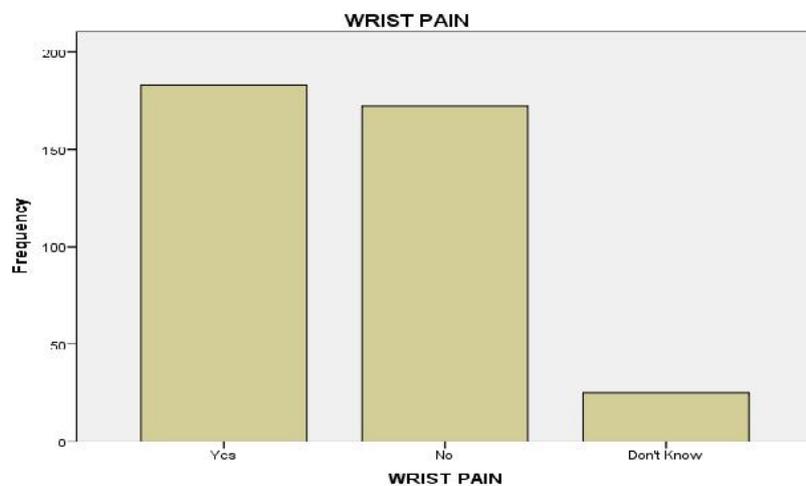


Figure 2: Wrist pain

When it comes to wrist pain, 48.2 % agreed that they had wrist pain, 45.3 % said no & 6.6 % said don't know.

Finger pain discomfort or numbness

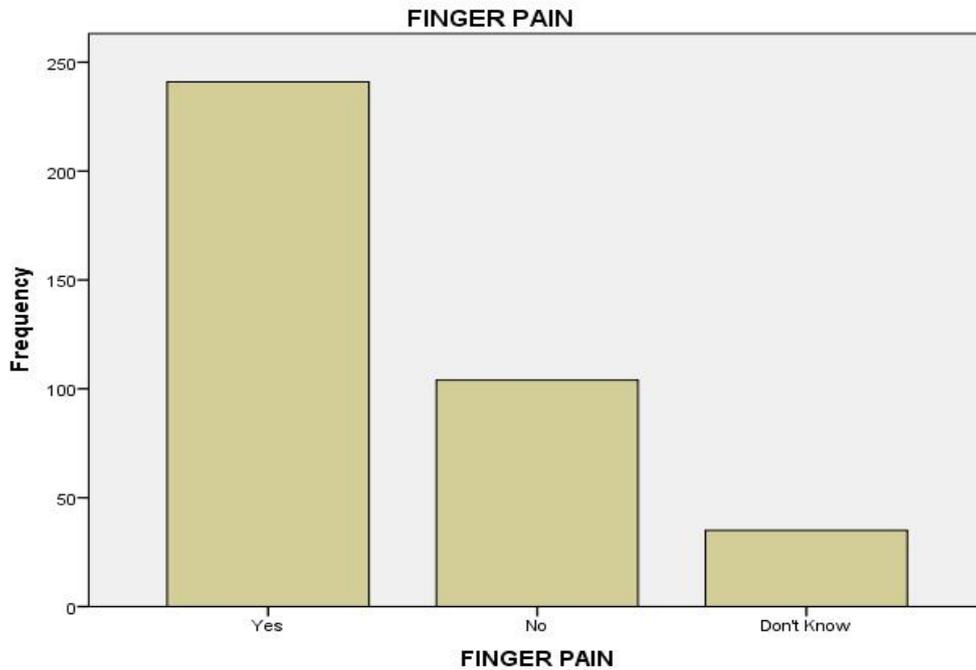


Figure 3: Finger pain

63.4 % experienced finger pain discomfort or numbness, 27.4 % didn't & 9.2 % don't know.

Eye Strain

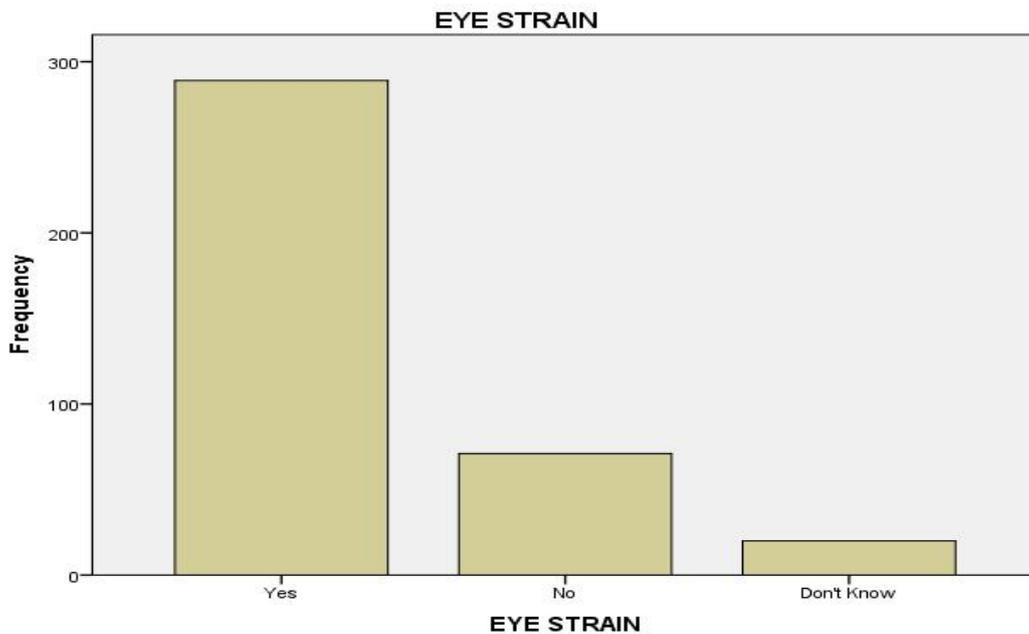


Figure 4: Eye Strain

76.1 % had responded yes to the question whether they have eye strain due to usage of smart phones, 18.7 % said no & 5.3 % said don't know.

## PSYCHOLOGICAL HEALTH ISSUES

The different psychological issues studied were:

Nomophobia (Anxiety of not having access to smart phone)

Table 1:Nomophobia

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY AGREE	103	27.1	27.1	27.1
AGREE	161	42.4	42.4	69.5
NEUTRAL	64	16.8	16.8	86.3
DISAGREE	27	7.1	7.1	93.4
STRONGLY DISAGREE	25	6.6	6.6	100.0
Total	380	100.0	100.0	

A total of 69.47 % (combining strongly agree & agree responses) said that they had experienced anxiety when they have no access to their smartphone.

Phantom Ringing Syndrome (PRS) or Ringxiety

Ringxiety is the feeling that one's phone is ringing when actually that's not the case.

Table 2:Ringxiety

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY AGREE	84	22.1	22.1	22.1
AGREE	118	31.1	31.1	53.2
NEUTRAL	49	12.9	12.9	66.1
DISAGREE	58	15.3	15.3	81.3
STRONGLY DISAGREE	71	18.7	18.7	100.0
Total	380	100.0	100.0	

53.15 % (combining strongly agree & agree responses) of total population said that they had experienced ringxiety.

Phantom Vibration Syndrome or Vibranxiety

Vibranxiety is the feeling that one's phone is vibrating when actually that's not the case.

Table 3:Vibranxiety

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY AGREE	59	15.5	15.5	15.5
AGREE	127	33.4	33.4	48.9
NEUTRAL	52	13.7	13.7	62.6
DISAGREE	78	20.5	20.5	83.2
STRONGLY DISAGREE	64	16.8	16.8	100.0
Total	380	100.0	100.0	

48.94 % (combining strongly agree & agree responses) of total population said that they had experienced vibranxiety.

## CONCLUSION

Excessive use of smart phones can have adverse effects in our lives. It can have negative effects on our health. The influence of cell phones and their effects on human health are still being tested and studied. The addiction and huge reliance on cell phones carry some risks on human development and health. The risks are emotional, physical, social and psychological. The advancements of modern technology, particularly, handheld devices (HHD) (smartphones, cell phones, and mobile devices, etc.) are tremendous. However, prolonged use of devices may cause symptoms of the musculoskeletal disorder, thumb, and neck. Overusing mobile phone can create technostress and also has a negative impact on health and personal work-related activities. If the users spend too much time on mobile phone, they can suffer from both physical and psychological health problems.

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