

A STUDY ON IMPACT OF SMARTPHONE IN AN ENGINEERING EDUCATION

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Abstract

The objectives of this study are to: (i). find out the Smart phones usage impact of the students in their studies. (ii). find out the relationship students health problems and using hours. 800 final year students were surveyed from different 10 engineering colleges in Chennai. Based survey and statistical analysis results, it is found that the students are differentiating from each other in terms of their purposes of using Smart phones for learning and study, social networking and entertainment. Smart phones usage behaviour required positive actions by the interested parties should be undertaken to reform this unexpected scenario.

Keywords: Smart phones, Education, Students, Chennai.

1. INTRODUCTION

The Indian telecom sector is the second largest in the world in terms of the number of subscribers. The sector has witnessed exponential growth over the last few years which were due to many factors such as affordable tariffs, wider service availability continuing the growth trend, the Telecom Sector has witnessed a substantial growth of subscriber base during the year 2017-18 also. At the end of the financial year, the subscriber base was 1206.22 million out of which 1183.41 million were wireless subscribers. During the year, wireless subscriber base recorded an increase of

13.23 million, with the overall tele-density of 92.84% at the end of March 2018. The year also saw an increase in the rural tele-density from 56.91% to 59.05%, while the urban tele-density decreased from 171.80% to 165.90%. During the year 2017-18, 98.07 million subscribers have submitted their porting requests to deferent service providers for availing Mobile Number Portability (MNP) facility. With this the MNP requests increased from 272.76 million at the end of March 2017 to 370.83 million at the end of March 2018, which shows subscribers exercising their preference of service provider. The Internet subscriber base in the country as on 31st March 2018 stood at 493.96 million as compared to 422.19 million as on 31st March 2017. The total broadband subscriber base in the country has increased from 276.52 million as on 31st March 2017 to 412.60 at the end of 31st March 2018.

This is the scenario of Chennai, whereas people more precisely the students (between 20-23 ages) are spending a significant amount of time on this device and the number of users is increasingly day by day in a noticeable way. Obviously, it is most expected scenario of Chennai to be a country of digital reformation as per the agenda of current Central ruling party and it also essential for building a generation of having enough technical know-how. But the worrisome fact is, whether this

modern-technology (Smart phones) well-equipped with the internet facility is helping or is being used by our students for their educational purposes or not. If it is not, then what actions should be taken by anyone (To Whom It May Concern) for making this right? On the other hand, if it is being helpful for them, then what actions should be taken by anyone from anywhere for reinforcing this? The main pursuit of this research initiative is to address these issues. Realizing the implication of this situation, certain objectives are expected to meet through these studies are to: (i). find out the Smart phones usage impact of the students in their studies. (ii). find out the relationship between students health problems and using hours.

2. LITERATURE REVIEW

Smart phones (also termed as mobile phone) is an anytime and anywhere device which is assisting its users to get available services discreetly and randomly. Moreover, Smart phones and other mobile technologies are affecting student's learning methods and pedagogy (Buck, McInnis, & Randolph, 2013). The contribution of Smart phones in distance learning and making students socially interactive and communicative is undeniable (Ketheeswaran & Mukunthan, 2016). Sung (2005) and Shongwe (2009) have conceded Smart phones as a tool that is mitigating the digital divide. Besides Smart phones, other technologies are also blessing us through revolutionizing the teaching and learning process by eliminating the distance barriers and facilitating smooth interaction among teachers and learners (Maiye & McGrath, 2010; Based on a survey of 124 students Morphituo (2014) has found that there is a

significant transformation in terms of using Smart phones instead of using laptops and this has substantial impact on the student's education, grades and study approach. Pange & Lekka (2015) have rated Smart phones as the most useful and popular technological device. More precisely, Spachos, et. al. (2014) has indicated the importance of mobile applications in continuing medical education. Similarly, a structured questionnaire based survey on 361 medical students of University of Birmingham, UK has revealed that 59% students have their own Smart phones; among which 37% students are really using this device as a learning tool (Robinson, et al., 2013). Moreover, 84% students believe that it can be useful for them also, but 64% thinks that it will be expensive for them to possess a Smart phones and 62% students don't get this device useful for their medical education (Robinson, et al., 2013). Another study on 83 respondents shows that 54% respondents use mobile phone based internet, whereas rest of the respondents has reported the cost of using mobile phone based internet as the reason for not using (Molnar, 2014). However, a prominent research initiative has found that how Smart phones or mobile based learning can help the students on their laboratory classes, more specifically on realizing administrative and safety instructions of the labs and knowledge related to their interested experiments (Shi, Sun, Xu, & Huan, 2016). Nevertheless, the authors have pointed out that the male students have more exposures to mobile learning rather than the female students (Shi, Sun, Xu, & Huan, 2016). 30 faculty members and 40 students of Sokoine University of Agriculture, Tanzania were gone through an in-depth interview, where it was found that most of them were using their Smart phones for learning and teaching purposes and some of them also

had m-learning applications (Mtega, Bernard, Msungu, & Sanare, 2012). Although, 7% of the 403 Japanese university students are using Smart phones for educational purposes. (White & Mills, 2012). Bomhold (2013) has found that 35 (76%) respondents (students) of the total number of 46 respondents use Smart phones apps mostly for finding their academic contents on the internet.

3. RESEARCH DESIGN,

Both discrepancies and insights are found on the above literature through a rigorous investigation in terms of methodological and contextual perspectives, based on these gaps and leads the primary quest for this research initiative is set to pinpoint whether the Smart phones usage behaviour of the students in Chennai is favour of their educational benefit or not.

3.1 Research Questions.

Q.1: How many hours' students using smart phones per day?

Q.2: Whether they using it for study or not?

Q.3: What are the health consequences?

5. LIMITATIONS& FUTURE RESEARCH

There are the certain limitation of this study are (i). Surveyed only 80 students from different 10 colleges irrespective of their branches.(ii). Some of the health problems are related with mobile usage or not, those are omitted in this research. In that case, the effect of these minor issues/reasons were not analyzed and

justified. So, these limitations can be resolved in further research initiatives.

6. CONCLUSION

This research is descriptive one, whereas it was tried to investigate that what is happening whenever a student is spending so much time on his/her Smart phones. Based on rigorous and careful statistical method based analysis, it was found that the students using Smart phones 6 to 8 hours in a day. Students using Smart phones averagely 5 to 7 hours per day for non education purpose. Students using Smart phones for education purpose less than one hour per day. Health problems rose because of using Smart phones for 6 to 7 hours per day, like neck pain, head ache, eyes vision defective etc... Motivation and mass-awareness about technology among the students can bring some changes on this unexpected scenario, but in that case the interested shareholders should come forward and act responsively, like the parents, teachers, social leaders, government, and any other authorities.

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