**CSCI.4923.04 Capstone in Interprofessional Informatics**

**Literature Review**

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**Introduction**

The smartphone is the latest technological obsession of everyone, a device so powerful almost capable of bringing the information of the entire world in the palm of your hand. By the 2010s the cellphone industry had been booming as smartphones began to take the household. To this day, a smartphone never ceases to amaze with creative innovation and the incorporation of evolving features. As smartphones have become an essential need of every person, there is a rising concern that has been a subject of debate for a while, smartphone addiction. Smartphone addiction unlike a drug-related addiction is an extreme dependency or fixation with the very devices we use. There are approximately 5 billion smartphone users as of 2020 according to a report from PewSearch.org. The problem is not with many people owning a smartphone device, it is with the people being obsessed with these devices to the point it actively as well as passively affects their health. This literature review explores the problem of smartphone addiction, identifies any prior research on the related topic, and sums up any information and insight that can help one to grasp a sufficient level of understanding of this problem.

**Search Process**

Several resources were used to locate the articles, datasets, journals, and research papers related to smartphone addiction. Different academic portals, news outlets, dataset search engines were utilized to gather and collect a strong set of evidence and information. From academic database like EBSCOHOST to data educating sites like Kaggle, the relevant information about the smartphone addiction were searched. With only little success in finding the relevant information, the search process was later taken on Google Dataset Search which proved to be a credible source to locate the exact dataset as well as the research papers. From the extremely time-consuming search session, one paper, in particular, paved the way to find the required dataset for the paper. ***Depression, anxiety, and smartphone addiction in university students - A cross sectional study*** by *Jocelyne Matar Boumoslehm and Doris Jaalouk* gave the necessary insights and information that was needed to initiate the study. Their first handed findings and a raw dataset helped to collect enough information to proceed further with the analysis. There are other sources as well that have been crucial for getting additional information. Sites like statista.com, plos.org, ScienceDirect, ResearchGate, Mendeley were all effectively utilized to collect tidbits of information.

**Synthesis and Summary of Resources**

From the pool of articles, research papers, and datasets that were obtained, most of them provided critical and crucial information that was right for the tone of the analysis. To begin with, the latest and exact number of global smartphone users was needed. This would provide a head start for the analysis. PewReseach.org had an interesting article about it. Today, it is estimated that more than 5 billion people have mobile devices, and over half of these connections are smartphones (Silver, 2020). Lancaster University’s research directory had one dataset that contained information of participants with their screen time over 13 days of smartphone usage. This study would help the reader understand the average screen time of an average user and the dataset will come in handy to unravel potentially new visual insights that are not visualized in its prior work. One of the papers that came across during the search process had an interesting insight regarding the link between late-night smartphone usage and quality of sleep among university students. The paper titled ***“The Effects of Smartphone Usage on University Students” ­***explored the connection between mental health and late-night smartphone use among students. It was concluded from the study that excessive smartphone use indeed has an impact on sleep quality thus affecting mental health in the long run.

Another research paper, ***A review on the effects of smartphone usage on attention, inhibition, and working memory***was an interesting read which did an empirical analysis on the effects of smartphone use and found that psychological aspects like memory and ability to pay attention to detail are affected by prolonged use of smartphones. Furthermore, the primary dataset retrieved for our analysis from the authors *Jocelyne Matar Boumoslehm* and *Doris Jaalouk* and their research on ***Depression, anxiety, and smartphone addiction in university students - A cross sectional study***has been crucial to determining necessary parameters and metrics to extract new results. Their cross-sectional analysis on different aspects of personality types and interpersonal behaviors drew many conclusions. One of them was that the excessive smartphone use does raise the level of anxiety beyond what is considered normal.

**Conclusion**

From the comprehensive search, all the relevant articles, prior works, journals, relating datasets have been gathered and the acquired resources are ready to be analyzed and explored to find more insights on them. The purpose of this research review was to help the readers understand and properly identify the issue of smartphone addiction by providing available information from prior work, research, and analysis that had been done on the subject. This review is meant to provide readers with a surface level of understanding and knowledge about the effects that excessive use of smartphones causes. Therefore, it is important to explore and analyze further with the collected resources and possibly some more to get an in-depth understanding and idea about the presented issue.

**References**

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