Gaming, Smartphone and FB Addiction CSCI 70700 - Ethics in CS Patti (Patricia) Elfers-Wygand Vanessa (Qianhui) Zhou

Gaming and SmartPhones have become the fastest growing pastime activity in the past several years. Most adults and children own smartphones and use them on an average of 3 hours and 15 minutes per day. (https://explodingtopics.com/blog/smartphone-usage-stats). It seems that with the ever exploding market on newer and improved smartphones, these statistics keep growing. Here are some statistics that may surprise you from amount of times the phone is picked up by a person daily::

| Time Spent on | Average Amount of | Percentage of Daily |
|---------------------|-------------------|---------------------|
| Smartphone | Times Per Day | Pick Ups |
| | | |
| Less Than 2 Minutes | 40 | 69% |
| | | |
| 2 to 10 Minutes | 15 | 26% |
| | | |
| 10+ Minutes | 3 | 5% |
| | | |

And here are global statistics that may even surprise you more noted on the table at the end of this paper.

With this rapid growth of Smartphone use comes the reasons for use. Although intended to make the work load easier, people are not only using them for work, but for play and entertainment as well. From watching videos, use of social media such as: Facebook, Instagram, SnapChat, video game playing, texting, and the list goes on, it's not surprising that these devices have become an object of addiction. Although convenient for many things, these devices can disrupt everyday living when addiction sets in.

Usually we begin by using our smartphones for checking time, texting, making calls, until we find the benefits of these mini computers. We see the pleasure aspects of gaming on these

devices and see that these games are designed so that you don't want to put them down. They distort our perception of time and sometimes reality. The bright colors and hypnotic sounds are no accident as explained in an article in Better by Today of NBC news (https://www.nbcnews.com/better/lifestyle/why-mobile-games-are-so-addicting-how-reclaim-your-time-ncna1031266). People also become addicted to meditation apps. The first sign of becoming addicted is that you are rationalizing the addiction. But risks to addiction include, bad sleep, squandered intimacy, and gaming as self-medicating, according the NBC New article. You can get your mobile game use under control in a number of ways. Track how much screen time you use daily and set limitations. If you are having trouble minimizing or quitting, it may be time to seek some help.

Besides addiction, this leads to a number of other disorders that can affect your daily living which, in fact, may lead to the need of counseling. In a study done with adolescents, gaming addiction may lead to social anxiety, depression and loneliness. The study included the use of a Child Social Anxiety Scale, Child Loneliness Scale and a Child Depression Scale. It was found that mobile game addiction was positively associated with social anxiety, depression and loneliness (Wang, J. L., Sheng, J. R, & Wang, H. Z., 2019, (https://www.frontiersin.org/articles/10.3389/fpubh.2019.00247/full).

Facebook is very popular and continues to grow. It has "over 2.27 billion monthly users and 1.15 billion daily active users." Amongst those usere are over 300 million users in India. Facebook is visit more than 3 times a day and average user can "spend 60 minutes, log in 2-5 times daily" (Thipparapu Rajesh, Dr B. Rangaiah, 2020, https://www.sciencedirect.com/science/article/pii/S2405844020300293). Adding smartphones to the use of Facebook, increase of addiction becomes another serious problem. There appears to be a lower level of social support than one might think with Social Media. Students between the ages of 18 and 35 were studied in a convenience sample to several different Social Media Questionnaires: Brazilian Smartphone Addiction Inventory (SPAI-BR), the Bergen Scale for Facebook Addiction, the Barrat Impulsivity Scale 11 (BIS-11), the Social Support Satisfaction Scale (SSSS), and the Brief Sensation Seeking Scale (BSSS-8). After completing the questionnaire, the interviewer conducted a Mini-International Neuropsychiatric Interview (MINI). The results included, (Facebook AddictionsFA, substance abuse disorders, major depressive disorder, anxiety and disorders. The group with Smartphone Addiction (SA) and FA demonstrate a higher score of substance abuse disorders, depression, and anxiety disorders when compared to the group with SA only. This shows that there only seems to be more problems with adding Facebook Addiction to the equation with Gaming Addiction (Khoury, J. M., André Augusto Correa de Freitas, Michele Ralil da Costa, Frederico Duarte Garcia, https://www.researchgate.net/publication/338732906 Smartphone and Facebook addictions s hare common risk and prognostic factors in a sample of undergraduate students)

So then what can we do? Well according to "Metro Family," we need to consider our technology use, how the adults are using tech and the children also. As a family, we need to set time limits, especially during family time. With kids, you must be consistent with rules, especially during school nights and school time. We need to strive for a healthy balance with other activities such

as sports, family time, reading, arts, board games, puzzles, even yoga and exercise. Make sure that devices are put away for the evening and kept there until needed for school, homework, or freetime. And finally, adults need to follow the same rules as the students. They need to be aware of their use and take the time to spend with their children without the devices present. Adults are the role models, and if their devices are constantly present, this just leads the children to think the same thing. In order to keep up with the ever changing technology use, we need to keep a balance between the tech and a healthy lifestyle to be able to live healthy and well balanced lives. If everything is used in moderation this can be accomplished!

Table on Global Smartphone Usage

| Ran | Country | Continent | Time Spent | Compariso | Compariso |
|-----|------------|-----------|------------|-------------|-----------|
| k | | | on | n to | n to |
| | | | Smartphon | Average | Average |
| | | | e per Day | | (%) |
| | | | | | |
| 1 | Philippine | Asia | 5 hours 47 | + 2 hours 4 | ↑ 35.7% |
| | s | | mins | mins | |
| | | | | | |
| 2 | Thailand | Asia | 5 hours 28 | + 1 hour | ↑ 32% |
| | | | mins | 45 mins | |
| | | | | | |
| 3 | Brazil | South | 5 hours 25 | + 1 hour | ↑ 31.4% |
| | | America | mins | 42 mins | |
| | | | | | |
| =4 | Colombia | South | 5 hours 9 | + 1 hour | ↑ 27.8% |
| | | America | mins | 26 mins | |
| | | | | | |

| =4 | South Africa | Africa | 5 hours 9 mins | + 1 hour 26 mins | ↑ 27.8% |
|-----|-----------------|------------------|--------------------|---------------------|---------|
| =6 | Argentina | South America | 5 hours 4 mins | + 1 hour 21 mins | ↑ 26.6% |
| =6 | Nigeria | Africa | 5 hours 4 mins | + 1 hour 21 mins | ↑ 26.6% |
| 8 | Indonesia | Asia | 4 hours 56 mins | + 1 hour 13 mins | ↑ 24.7% |
| 9 | Malaysia | Asia | 4 hours 49 mins | + 1 hour 6 mins | ↑ 22.8% |
| 10 | Mexico | North America | 4 hours 37 mins | + 54 mins | ↑ 19.5% |
| =11 | Saudi Arabia | Asia | 4 hours 35 mins | + 52 mins | ↑ 18.9% |

| =11 | UAE | Asia | 4 hours 35 mins | + 52 mins | ↑ 18.9% |
|-----|--------|-----------------|-----------------|-----------|---------|
| 13 | Ghana | Africa | 4 hours 34 mins | + 51 mins | ↑ 18.6% |
| 14 | Egypt | Africa | 4 hours 25 mins | + 42 mins | ↑ 15.8% |
| 15 | Turkey | Europe/A sia | 4 hours 16 mins | + 33 mins | ↑ 12.9% |
| 16 | Taiwan | Asia | 4 hours 12 mins | + 29 mins | ↑ 11.5% |
| 17 | India | Asia | 4 hours 5 mins | + 22 mins | ↑9% |
| 18 | Kenya | Africa | 3 hours 51 mins | + 8 mins | ↑ 3.5% |

| - | Global Average | - | 3 hours 43 mins | - | - |
|-----|-------------------|-----------------|--------------------|-----------|--------|
| 19 | Romania | Europe | 3 hours 41 mins | - 2 mins | ↓ 0.9% |
| 20 | Russia | Europe/A sia | 3 hours 39 mins | - 4 mins | ↓ 1.8% |
| 21 | Singapor | Asia | 3 hours 38 mins | - 5 mins | ↓ 2.3% |
| 22 | Morocco | Africa | 3 hours 35 mins | - 8 mins | ↓ 3.7% |
| 23 | Portugal | Europe | 3 hours 34 mins | - 9 mins | ↓ 4.2% |
| =25 | Vietnam | Asia | 3 hours 32 mins | - 11 mins | ↓ 5.2% |

| =25 | Hong Kong | Asia | 3 hours 32 mins | - 11 mins | ↓ 5.2% |
|-----|----------------|------------------|--------------------|-----------|---------|
| 26 | Israel | Asia | 3 hours 31 mins | - 12 mins | ↓ 5.7% |
| 27 | US | North America | 3 hours 30 mins | - 13 mins | ↓ 6.2% |
| 28 | China | Asia | 3 hours 6 mins | - 37 mins | ↓ 19.9% |
| 29 | Ireland | Europe | 3 hours 5 mins | - 38 mins | ↓ 20.5% |
| 30 | New Zealand | Oceania | 2 hours 59 mins | - 44 mins | ↓ 24.6% |
| 31 | Poland | Europe | 2 hours 58 mins | - 45 mins | ↓ 25.3% |

| 32 | Sweden | Europe | 2 hours 55 mins | - 48 mins | ↓ 27.4% |
|----|----------------|------------------|--------------------|--------------------|---------|
| 33 | Canada | North America | 2 hours 51 mins | - 52 mins | ↓ 30.4% |
| 34 | Australia | Oceania | 2 hours 49 mins | - 54 mins | ↓ 32% |
| 35 | Spain | Europe | 2 hours 48 mins | - 55 mins | ↓ 32.7% |
| 36 | South Korea | Asia | 2 hours 46 mins | - 57 mins | ↓ 34.3% |
| 37 | Italy | Europe | 2 hours 45 mins | - 58 mins | ↓ 35.2% |
| 38 | UK | Europe | 2 hours 41 mins | - 1 hour 2 mins | ↓ 38.5% |

| 39 | Greece | Europe | 2 hours 37 mins | - 1 hour 6 mins | ↓ 42% |
|-----|-----------------|--------|--------------------|---------------------|---------|
| =40 | Austria | Europe | 2 hours 29 mins | - 1 hour 14 mins | ↓ 49.7% |
| =40 | Switzerla nd | Europe | 2 hours 29 mins | - 1 hour 14 mins | ↓ 49.7% |
| 42 | Netherlan ds | Europe | 2 hours 22 mins | - 1 hour 21 mins | ↓ 57% |
| =43 | Belgium | Europe | 2 hours 19 mins | - 1 hour 23 mins | ↓ 60.4% |
| =43 | France | Europe | 2 hours 19 mins | - 1 hour 23 mins | ↓ 60.4% |
| 45 | Germany | Europe | 2 hours 14 mins | - 1 hour 28 mins | ↓ 66.4% |

| 46 | Denmark | Europe | 2 hours 13 | - 1 hour 29 | ↓ 67.7% |
|----|---------|--------|------------|-------------|----------|
| | | | mins | mins | |
| | | | | | |
| 47 | Japan | Asia | 1 hour 39 | - 2 hours 4 | ↓ 125.3% |
| | | | mins | mins | |
| | | | | | |

References

Barnett, B. *Plugged-in families: The art of balancing technology in your family.* Metro Family Magazine.

https://www.metrofamilymagazine.com/plugged-in-families-the-art-of-balancing-technology-in-your-family/

- Howarth, J. (Sept. 16, 2022) *Time spent using smartphones (Statistics 2022)*. Exploding Topics https://explodingtopics.com/blog/smartphone-usage-stats
- Khoury, J., Garcia, F. D.., (2019) Smartphone and Facebook addictions share common risk and prognostic factors in a sample of undergraduate students. Trends in Psychiatry and Psychotherapy . 2019:P 41(4)-358-36
 https://www.researchgate.net/publication/338732906
- Omek, b. Y. & Gundogomus, I. (January 7, 2022) The effects of smartphone and internet gaming addiction on eating attitudes among university students Psychiatry Investig. 2022 Jan; 19(1): 1–8. doi: 10.30773/pi.2021.0230

 PMCID: PMC8795602PMID: 34986558

 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8795602/
- Rajesh, T., Rangaiah, B. (Jan, 2020). *Facebook addiction and personality.* Science Direct (6) 1, Jan. 2020. https://doi.org/10.1016/j.heliyon.2020.e03184. https://www.sciencedirect.com/science/article/pii/S2405844020300293
- Wang, J-L., Sheng, J-R., Wang, H-Z. (Sept. 6, 2019). The association between mobile game

addiction and depression, social anxiety, and loneliness. Frontiers in Public Health https://doi.org/10.3389/pubh.2019.00247
https://www.frontiersin.org/articles/10.3389/fpubh.2019.00247/full