

Techno Takeover

How social stimuli and Covid-19 has contributed to the addiction of technology in the teens of 2020-2021.

June Loukinas 7th grade

Tibbetts Middle School

Table of Contents

- Title.....Page 1
- Table of Contents.....Page 2
- Acknowledgements.....Page 2
- Abstract.....Page 3
22
- Introduction.....Page 4-5
- Research (Literature review).....Page 6
- Materials.....Page 7
- Procedures.....Page 8
- Data (Results).....Page 9-11
- Conclusion.....Page 12
- Bibliography.....Page 13

Acknowledgements

I would like to thank to Ms. Durphy, as she was a great help in this study, My English teacher, Ms. Baber, and my parents for editing, and finally, Cindy Colomb, along with numerous teachers for additional support. Lastly, my brother for the inspiration to reflect upon myself to consider this specific project.

Introduction

There's no doubt that this year has been unpredictable, to say the least! Teens battling with making good use of their time certainly isn't new! Social networks had already become an avenue that many adolescents have chosen to consume their attention, however since the Coronavirus has restricted our lives with no in person outlets, teens have turned to social platforms for the interaction that they crave, and a probable addiction. In this study, the researcher has found and collected data on whether media usage has actually increased during Covid-19 and how does it correlate to the lack of face to face, in-person social interaction. A survey will be conducted with the students of Tibbetts Middle School in order to prove the hypothesis. The survey will comprise various questions involving the connection between media usage, social stimuli, and the current pandemic.

Research

When you hear the word addiction, do you usually think of drugs and alcohol? There is a less than obvious universal addiction, technology. It is widely believed that, technology is definitely not as addictive as substance abuse, with all the positive stimuli and reward, the addiction to social media platforms can become just as destructive. Addiction is primarily caused by a successful reward, or operant conditioning. As an example, if you were to skip class and the cool kids begin to noticed appreciate your actions, you're getting a positive reward making you more likely to repeat the act. Whereas, if you're caught skipping class and get detention you'd be less likely to repeat the truancy. When having positive reward (which could even be as simple as playing a game, pleasurable reward) dopamine is released. Dopamine is a hormone that is released during pleasurable rewards such as eating your favorite food, being praised, and even exercise, and sex. There are three dopamine pathways, the mesocortical (memory, cognition, emotional behavior, attention, and learning.), meslimbic (pleasure and reward seeking behaviors; addiction, emotion, and perception), and nigrastriatal (movement and sensory stimuli). Dopamine rewards us and inspires to repeat the same action again and again, a.k.a addiction.

Every time you receive a stimulus you gain a mental reward, just like technology, social stimuli can result in a release of dopamine, reinforcing the interaction. From talking to someone through text, sending a text, or getting likes on a video or picture, you're receiving social stimuli! This stimuli is nearly limitless! Studies show that some teens can become dependent on the affirmation of their peers, eventually causing self-isolation. The researcher's own survey shows others have also turned to social platforms for help with depression, support, and a place to gain friends, all factors of social stimuli. In fact, according to the Hopeland survey with 1,300 participants, "90% of participants turned to the internet/social media to help with depression, including mental health issues.". Due to Covid-19, many have become dependent on social media for some kind of interaction and have even began to look upon these networks in an addictive way.

Social stimuli is not all bad, there are many positive factors such as support groups, hotlines, devotionals to just name a few avenues to offer help and guidance.

Addiction can occur when a stimuli replaces a void in one's life. The researcher created a simple, to the point survey that included some of the main social stimuli in these social platforms. The hypothesis was that if adolescents have significantly increased their time on social platforms, then, at least 60% of the individuals surveyed will say that they use social networkings for social stimuli and that their screen time has increased since Coronavirus. Using the research, the researcher made three questions. The first question, why do you use these social outlets, was made to determine whether teens truly do use these social networks for social stimuli. The choices included, just to talk to someone, for fun, whenever I feel sad, support(communities), recognition, and boredom. The researcher classified them all to be social stimuli except for the variable, for fun. Another question was how long the participant spends on average on their social medias. The last question was whether or not they had noticed an increase in their media use since Coronavirus had begun. After conducting the survey, the researcher had a successful 102 participants and the hypothesis had proven correct!

Materials

- Questions for the survey (5 maximum)
- Participants
- A survey template (google forms)
- Resources

Procedures

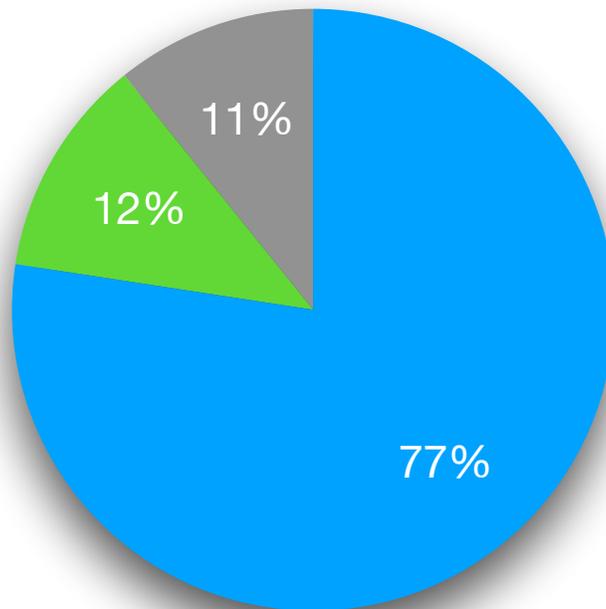
- I. Narrow down problem/question.
- II. Research! Research! Research!
- III. Decide on survey for data collection.
- IV. Create three main questions for the survey (5 maximum).
- V. Plug the questions into Google Forms survey template.
- VI. Reach out to instructors to coordinate the distribution of survey amongst peers.
- VII. Gather data from completed surveys.

DATA

Media use increase since Coronavirus

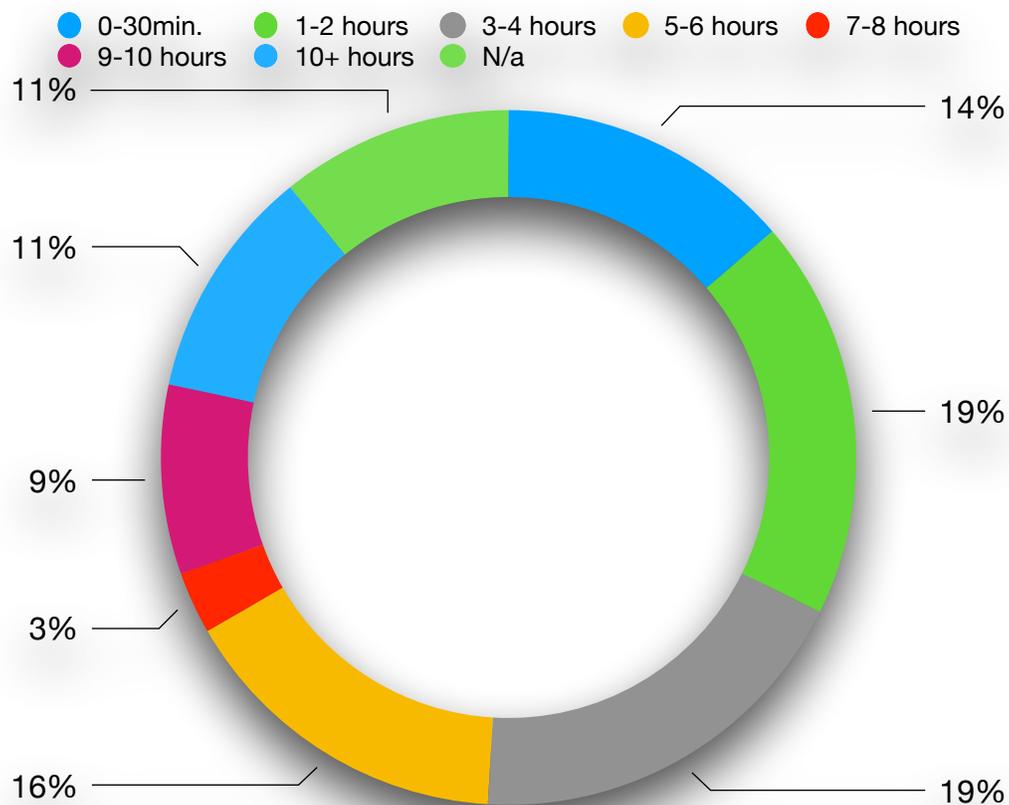
Media use increase since Coronavirus.	
Yes	77.5
No	11.8
N/A	10.8

● Yes ● No ● N/A



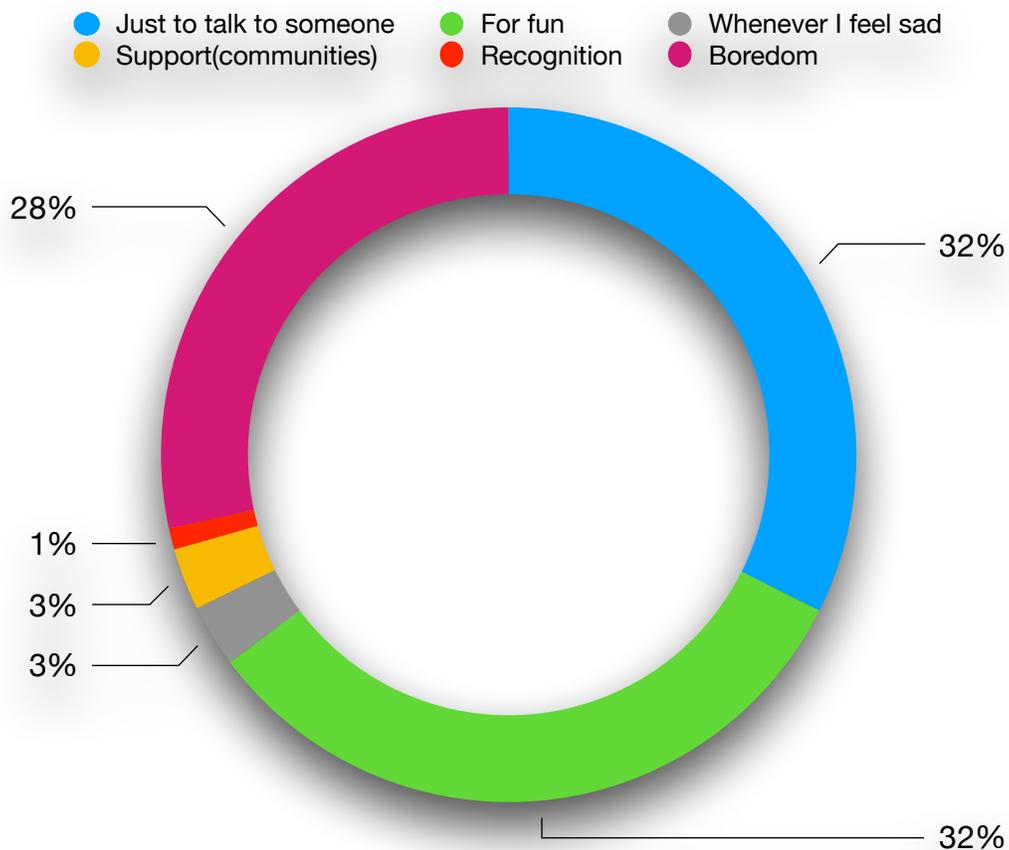
Time spent on social medias

Time spent	Percentage
0-30 min	13.7
1-2 hours	18.6
3-4 hours	18.6
5-6 hours	15.7
7-8 hours	2.9
9-10 hours	8.8
10+ hours	10.8
N/a	10.8



Social media usage reasoning

Variables	Percentage
Just to talk to someone	32.4
For fun	32.4
Whenever I feel sad	2.9
Support (communities)	2.9
Recognition	1
Boredom	28.4



Conclusion

The hypothesis had been proven correct after the survey with 102 participants! The first question showed that 67.6% of the teens use these social networkings for social stimuli. Backing that up, 76.4% claimed to have noticed an increase of media use since Coronavirus began! With the average usage of about 4.5 hours a day we can conclude that adolescents have significantly increased their time on social media, at least 60% (resulted in 67.6%) of the individuals surveyed use social media for social stimuli and their screen time has increased since coronavirus. Though there was an unexpected variable that may have changed the result of the time usage on social platforms, some participants were a little confused and didn't take in account video games, Zooms, Among Us, Youtube, etc. If the researcher was too redo this project the question would be more precise.

Bibliography

- <http://sitn.hms.harvard.edu/flash/2018/dopamine-smartphones-battle-time/>
- <https://www.news-medical.net/health/Dopamine-Functions.aspx>
- [https://www.simplypsychology.org/operant-conditioning.html#:~:text=A%20Skinner%20box%2C%20also%20known,key%20p,ecking%20\(for%20pigeons\).&text=Punishment%20weakens%20behavior.](https://www.simplypsychology.org/operant-conditioning.html#:~:text=A%20Skinner%20box%2C%20also%20known,key%20p,ecking%20(for%20pigeons).&text=Punishment%20weakens%20behavior.)
- <https://journals.sagepub.com/doi/abs/10.1177/2050157914562656>
- <https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>
- <https://www.providence.org/news/uf/618911654#:~:text=A%202017%20study%20from%20the,control%20your%20natural%20sleep%20cycle.>
- <https://www.frontiersin.org/articles/10.3389/fnbeh.2010.00022/full#B33>
- Talk2be well podcast
- Hopeland survey