The Impact of Social Media on the Youth

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ABSTRACT

This study focuses on how the social media platforms: YouTube, Facebook, Snapchat, and Instagram have impacted youths' health. The greater percentage of these youth indicates that their access to the platforms was mainly through their smartphones. The conclusive findings indicate that three of the identified social platforms negatively impacted the youths' health. YouTube showed to have a minimal positive impact on the youths' health.

Keywords

Social media, Facebook, Snapchat, Instagram

Introduction

Many studies claim that social media positively impacts youths' health without pinpointing specific platforms. The consensus is social media provides a gateway for youths to express themselves and connect with youths of similar beliefs (Shapiro and Margolin, 2014). Social media is touted to be platforms where youths can receive psychological support. Support can come from meeting other youths who share similar experiences as basic as receiving likes, subscriptions, and followers to their pages or content (Pornsakulvanich, 2017; Shapiro & Margolin, 2014). Some social media communities provide avenues to identify and support youths struggling with a range of challenging issues (Shapiro & Margolin, 2014).

Quick access to any type of needed information is another purported benefit of social media. Youths who consume social media are more aware of current news and political happenings (Allcott, Braghieri, Eichmeyer, & Gentzkow, 2019). Social platforms serve those needing medical advice and attention. Young people use these platforms to contact healthcare providers and share ailments and possible remedies to many illnesses. (Hausmann, Touloumtzis, White, Colbert & Gooding, 2017; Zhao & Zhang, 2017). A study released in 2018 by Ahmed, Quinn, Hancock, Freimuth & Jamison revealed that users of two major platforms, Facebook and Twitter, were more likely to agree to a flu vaccine.

Much of the reviewed research concentrated on the negatives associated with social media usage, specifically the detrimental impact on the youths' psychological health. Two of the ills attributed to too much social media consumption, especially before bedtime, include less time sleeping and lower quality of sleep (Chassiakos et al., 2016; Strickland, 2017; Woods, 2016). Studies identify a potential link between insufficient sleep and emotional imbalances and drug abuse (Arora et al., 2018; Bauducco, Flink, Jansson-Frojmark & Linton, 2016; Woods, 2016). Similar studies appropriate the link between insufficient sleep (below six hours) and suicidal tendencies and thoughts (Weaver, Barger, Malone, Anderson, and Klerman, 2018).

The impudent browsing of popular social media sites has left many youths feeling insufficient (Walsh, 2017). Many become anxious because they fear being left behind (Beyens, Frison, and Eggermont, 2016). A condition called FOMO, says Fox & Moreland, 2015; Przybylski, Murayama, DeHaan & Gladwell, 2013; Shafer, 2017; Utz, Tanis, & Vermeulen, 2016 sees youths having a fear of missing out, akin to the fear of being left behind. These youths are mostly absent-minded and are unable to function effectively in class. They are increasingly dissatisfied with their lives and relationships and experience great levels of anxiousness. The incidents of anxiety and despondency are seemingly more prevalent on platforms that cater

more to images. (Burrow & Rainone, 2017; Shapiro & Margolin, 2014; Wright, White & Obst, 2018). Cyberbullying is another negative phenomenon arising from the advent of social media. Cyberbullying has resulted in more youths attempting to take their lives than regular bullying (Kuehn, Wagner & Velloza, 2018).

According to Smith, Anderson & Caiazza (2018), youths favour four specific social media sites. YouTube, Instagram, and Snapchat seem to be their preferred haunt (Anderson & Jiang, 2018; Murphy et al., 2018; Verto Analytics, 2018). The most favoured one seems to be YouTube. Nearly 70% of youths utilize Snapchat daily, and a little bit over half of the teens use Facebook (Anderson and Jiang, 2018). Various studies reveal youths daily spending many hours on social media platforms. Asano (2017) revealed that youths spent up to 9 hours on social media every day with the majority of the time being dedicated to YouTube. According to Strickland (2014), 20% of youths spend up to 6 hours on social platforms; others spend approximately 3 hours. The current study will reveal the uptake in social media time to be much higher than mentioned in these previous studies. An examination of previous research reveals studies concerning the psychological and physical impacts of social media usage on youths, so our current study is not the first.

Statement of the Problem

Research shows that constant consumption of social media negatively impacts the youth psychologically. Six years ago, also a quarter of the youths had access to a smartphone. A quarter of them used social media. (Anderson & Jiang, 2018; Lenhart, 2015). Today almost all teens have access to smartphone, and nearly 50% have been constant consumers of social media content. In light of the number of youths utilizing the social platforms, some intervention must be put in place to limit the harm this overuse and dependence will cause to their emotional and psychological development (Arain et al., 2013). The National Alliance believes that 20% of youths will experience episodes of psychological imbalance on account of their social media consumption. (Mojtabai, Olfson & Han, 2016). Studies by Mojtabai and Oldfson published in 2016 also point to a link between social media usage and increasing incidents of youth despondency. Other research has uncovered links between youths experiencing low self-worth, feelings of isolation, and depression to their consumption of Facebook (Chassiakos et al., 2016; Weinstein, 2017; Woods, 2016).

This study aims to discover the positive and negatives effects of four major social media platforms on youths age 15-18. The sample population for the study comes from Amman, the capital of Jordan. 2020 and 2021 are the years being considered. The study will look at how social media use has impacted the ten components of health as advertised by the CDC in 2018 and the Royal Society for Public Health in 2017. The found major platforms assessed in this study are Facebook, YouTube, Snapchat, and Instagram. The study assesses how each platform affects each of the ten components of health.

Research Questions

1.Which social media site do youth view as having in the greatest positive impact on them?
2.Which social media site do youths view as having in the greatest negative impact on them?
3.Is there any correlation between youths' social media usage and their health?

Objectives:

1.To discover which of the four social platforms have the greatest positive impact on the health of youths.
2.To discover which of the four social platforms have the greatest negative impact on the health of youths.
3.To uncover possible link between youths' social media usage and health.

Limitations

Participants were chosen from persons that were available and not necessarily from a randomly chosen pool.

Delimitation

Participants were restricted to those from 15 to 18 years. These boundaries allow the researcher to choose participants that were experienced in using social media platforms. The age requirement for majority of social media platforms is 18.

Assumptions

1.Participants will understand and correctly interpret the questions and instructions on the instrument used.

2.Participants will be credible in their responses.
3.Participants in the same age range are compatible.

Literature Review

The brain is experiences growth and changes from age ten up to twenty-four. Given that the prefrontal cortex is developing, youths are more susceptible to engage in high-risk and pleasure-getting activities (Arain et al., 2013). Studies carried out by Tamir and Mitchell (2013) suggest that the youths' brain that responds to rewards is more likely to be active whenever they were responding to personal questions. Sherman, Payton, Hernandez, Greenfield & Dapretto (2016) discovered that the reward section of the brain is more prominent when youths are viewing social media content that is very popular – liked, supported, or positive comments. These opportunities are provided on platforms like YouTube, Facebook, and Instagram. Likewise, the platforms that encourage the posting of personal content activate the pleasure centre of the brain. The viewing of popular personal content that is considered risky causes decreased cognitive activity. Decreased cognitive activity, while viewing the risky personal content that activates the pleasure centre could be why many youths are more likely to participate in risky activities (Sherman et al., 2016). Other behaviours such a drug usage, inactivity, and continuous stress negatively impact the brain during the developmental phase (Arain et al., 2013)

As social media consumption among youths increases, their interaction with the real world decreases. Youths spend little time engaging in real face-to-face conversations, physical activities, and reading (Twenge et al., 2017). The increase in smartphones usage and online consumption has dramatically face-to-face interactions along with its benefits. Youths are disinterested in these face-to-face interactions as they are engrossed in their online interaction (Luna, 2018). The phenomena of digital distractions have seen much interest among researchers as the use of smartphone technologies increase.

The literature which underscores the effect of social media on the psychological health of youths centres around two social media platforms: Facebook and Instagram. According to an undated article by the National Alliance on Mental Illness, 20% of youths between 12 and 19 years at some point will experience some psychological episode. The illnesses will either be some form of mood disorder or anxiety disorder. As suggested by the National Alliance on Mental Illness, these disorders will affect just under 20% of youth; 11% affecting the former, and 8% affecting the latter. The disorders will also leave lasting negative consequences on youths who are affected by them. According to the National Center for Injury Prevention and Control (2017), nearly half of youths impacted by psychological disorders fail to complete their high school education. Estimates put the percentage of youths that have some psychological illness and commit suicide at 90%. The second most prominent cause of death by youths aged between 11 and 25 years is suicide.

Studies by Frison & Eggermondt (2017) have shown that indiscriminate browsing across social media platforms is particularly damaging to psychological health. A two-part study on youths that reported depression while browsing Instagram yielded some interesting results. During nine months, having done two assessments on youths, they were equally depressed at two different points at the beginning and end of the nine months.

A report by The United States Department of Health and Human Services (2017) suggests that adults and youth believe that in-person bullying is of less concern than cyberbullying. The reason for such concern is that cyberbullying is not restricted by location, and its content is permanent. The perpetrator always has access to the information, and the victim can never be at ease. A study on cyberbullying by Strickland (2017) suggests that social media is a primed for cyberbullying because users are lured into believing they have found companionship with their online contact. Users reduce their privacy restrictions; this reduction allow perpetrators access to more personalized information which they then use against users. A study by Hamm et al. (2015) and White et al. (2016) reveals that over 90% of survey respondents indicated that cyberbullies targeted their close relationships with families, close associates, and intimate partners. The safeguards implemented by social media platforms to allow users to secure their personal information and restrict access. These safeguards may result in a false sense of security, much heartache, and

anxiety when information is misapplied (Sokol, 2013; Strickland, 2017).

Current literature also points to negative associations between cyberbullying and psychological health. There have been found associations with a breakdown in familial and other relationships and a lower self-perception. Some of the other observable results are drug abuse and increased aggression, anxiety, and despair. The tendency towards the thought of and planning suicide is also increased (Chassiakos et al., 2016; DePaolis & Williford, 2018; Hamm et al., 2015).

With the growth and popularity of social media, many youths experience a news form of anxiety termed FOMO. The acronym FOMO means a Fear of Missing Out. This fear comes about when one is constantly apprehensive that by not being present online, they are missing some big event, being left behind on current issues, trends, or missing some fun or exciting experience (Beyens, Frison, & Eggermondt, 2016; Oberst, Wegmann, Stodt, Brand, & Chamarrow, 2017; Przbylski et al., 2013). Social media brands itself as the vehicle to connect individuals and make new friends, but youths are finding themselves consistently anxious about maintaining such friendship, hence the need to be online at all times. They live in fear of being replaced by a superior friend if they fail to respond to a post or make their post to maintain their good standing within a group. The result is a constant need to be online to check their messages and severe anxieties when they cannot do so. FOMO gives way to unhealthy desires such as inordinate comparisons and the desire to be noticed and liked. FOMO also gives way to depressed happiness and feelings of exploitation, and unfair treatment. These feelings are especially noticeable for the users of Facebook and Instagram (Strickland, 2017). A 2016 study by Beyens et al. revealed that 25% of youths experienced some levels of stress when not on Facebook. These youths believe their absence from Facebook meant missing out on important information they need to know. Likewise, 10% of youths indicated some stress at not having a sense of belonging in a group. Beyens et al., 2016; Przybylski et al. (2013) also discovered that youths who craved traction, and are easily satisfied in most spheres and are generally dissatisfied with their lives experienced much more FoMo than their peers.

Methodology

Data will be obtained from participants on a one-off basis. Their view on how social media use has impacted their health is the target. The study will find and examine youths' views on the question of how social media use has impacted their health. In the study, the environment remains constant, variables are constant, and any intervention strategies are absent. The study is of a descriptive, short sectional nature.

Participants

The participants chosen for this study were male and female students from Amman, the capital of Jordan. The age range selected was students from 15-18. Two thoughts went into choosing the lower age limit 15. First, the general age for sign-up across social platforms is 13. Secondly, at 15 students would already have had enough experience on the various social media a platform. The upper age limit was placed at 18 since there are students in high school at that age. The participants were questioned on how they thought social media usage impacted their health. Samples were chosen using a convenience method. With this approach, participants are chosen from the prescribed group based on their availability. (Cottrell & McKenzie, 2011, p. 133)

Research Instrument

Each participant received a survey containing 62-questions. The survey was divided into two sections. Section 1 asks participants to fill in some personal information such as age and gender. Participants were asked to indicate their general views of social media, their preferred platform, method of access to the platforms, and the time they spent on each platform. In section 2, participants are asked to respond to 14 questions for each of the four social media platforms. As part of the 14 questions, participants are asked to assess how the four social media platforms impact nine areas of health. They were to rank each of the 56 statements using a type of Likert scale with the following key:

-2 – a lot worse

-1 – a little worse

0 – has no effect

1 – a little better

2 – a lot better

The 56 statements comprised the 14 statements for

each of the four social media platforms. Each statement guided the participant present an overview of how they believed each social media platform impacted their health.

Data Collection Procedure

Approach was made to administrators at public schools in Amman to allow their students to use 10 minutes of their class session to participate in the online survey. After receiving approval, parents received consent letters; these letters were signed and received two days before the scheduled taking of the online survey. The participants were informed they would be required to say what effect noted social media platforms had on their health based before they took the survey. The classroom teacher read the consent form for each participant.

Data Analysis

Data analysis was completed using two tools:

1. SPSS. This tool aided in the calculation of averages, standard deviation, mode, and percentage scores based on the data collected.

2. ANOVA was used in the analysis of the relationship between the four social platforms and youth health.

3. Spearman's Rank Order Correlation captured the data on how much time youth spent on each social media platform and the associated health scores of each platform.

Three hundred thirty-nine surveys were ready for completion, but 48 of these had to be eliminated from the total. Eight of the selected students declined to participate in the survey. The other 40 had greater than 5% of the required data missing. Five surveys had less than 5% of the required data missing; these were not omitted, but the mean was used to calculate of the data for these five surveys.

Demographic Results

Students from four government institutions in Amman are the medium from which the survey data is gathered. The average age of the students participating was 15. Students supplied the following data:

☐ Age

☐ Gender.

☐ Their views of social media

☐ Their preferred platform.

☐ The method of access to the platforms.

☐ The time they spent on each platform.

Table 1: Demographic Population

Age	Number
15	137
16	79
17	25
18	50

The participants were asked to estimate how much time they spent online in minutes for each social media platform. Snapchat came out as the channel that students spent the most time viewing, scoring an average of 140 minutes within 24 hours. Time on YouTube totalled 102.44 average minutes. The average time spent on Instagram was 78.78 minutes, while the average time spent on Facebook was 17.94 minutes. Snapchat and YouTube were the social media platforms that students spent the most time on. Viewing from the range of time spent in hours, YouTube and Instagram came out as the preferred platform with a range of 0 –12 hours. The time students were online was also grouped into 30-minute blocks. An analysis of this data revealed time spent on Snapchat varied from 0 minutes to 120 minutes; time spent on Instagram and YouTube varied from 0 – 60 minutes, while time spent on Facebook varied from 0 to 30 minutes.

Research Question #1

Students were given a scale with four numbers to rank the effect of each social media platform. The scale and their respective key are below:

-2: "a lot worse."

-1: "a little worse.

0: "neither worse nor better."

1: "a little better."

2: "a lot better."

For each platform, a composite score was devised. The reliability of the data was then tested using Cronbach's alpha. All four social media platforms returned a score of .8, which made the data reliable given that Cronbach's alpha puts the reliability score at .7.

In Table 2, we have the standard deviation and composite mean scores for the four social media platforms. An analysis using ANOVA shows a great statistical difference in how the four platforms affect students' health. The only positive mean score came from YouTube; all the other platforms scored a negative mean. The results suggest that only YouTube positively impacts the health of the students. For YouTube,

the standard deviation was 7.15 and a mean score of 1.08.

Table 2 Statistics

Item	Mean	Standard Deviation
Health score for Facebook	-1.21	5.90
Health score for YouTube	1.08	7.15
Health score for Instagram	-2.90	7.91
Health score for Snapchat	-1.93	8.27

Research Question #2

The data gathered from research question #1 formed the basis for the answer to question #2. In table 2 above, the standard deviation scores and composite mean scores for each of the four platforms are highlighted. Instagram is suggested to have the greatest negative impact on youth's health with a mean score of –2.90. Snapchat had the second greatest negative impact on the youth's health. An analysis using ANOVA shows a great statistical difference in how the four platforms affect students' health.

Research Question #3

For this question, the participants were asked to estimate (in hours) the time they spent on each of the four social media platforms. The noted times are provided in minutes as some participants spent on each were less than an hour. The results indicated the following average minutes on each platform:

☐Facebook -- 244 minutes

☐YouTube 100 minutes

☐Instagram – 77 minutes

☐Snapchat – 68 minutes

The analysis of all the data revealed a weak link between the time youths spent on social media platforms and the effect on their health. Only on YouTube was seen a slight positive link with (r (289) = .237, $p < .001$). The link between the two variables for each of the other three platforms was relatively insignificant. Spearman Rank Order Correlation was used to compare the time spent on each platform with their corresponding health score. The scores are as follows:

☐Facebook (r (289) = -.014, $p = .40$)

☐Instagram (r (289) = .056, $p = .17$)

☐Snapchat (r (289) = .051, $p = .19$)

The scores did not indicate any meaningful link between the two variables.

Findings

The findings reveal similar results to other studies that have been done. The average time that youths spent on social media was very similar. Strickland's 2017 study suggests an online time of 3.8 hours, while this studied netted 4.5 hours. The favourite platform of the youths is Snapchat, with 60.5% of the participants indicating the site; this result is similar to the findings of Anderson and Jiang (2018). Another consistent finding was the discovery that most youths access social media sites using their smartphones. A whopping 95% of the youths indicated that the smartphone was their preferred device when accessing social media sites. This finding also correlates with Anderson and Jiang's 2018 findings.

The finding showed no correlation with previous research was the link between time spent on the platforms and youths' health. Other studies found a negative correlation between the two variables, especially regarding psychological health. This study revealed a very little link between time spent online and the psychological health of youths. Such previous researches were done by (Lin et al., 2016; Twenge et al., 2017; Woods, 216). Those researches indicated a positive link between time spent online and despair and anxiety in youths. Likewise, the 2017 study by Twenge et al. (2017) indicated a link between youths prone to suicidal tendencies and them spending greater than 2 hours a day perusing social media content. The only correlation seen in this study was that YouTube had an insignificant positive effect on youths' health. A weak link was also discovered between time spent on YouTube and Snapchat and sleep deprivation. The more time youths spent on these two platforms is, the less they sleep.

Recommendations

Parents and teachers need to understand the significant place that social media has in the lives of today's youths. They need to be informed of what pulls the youth to these platforms and how to develop and implement effective monitoring strategies for the social media platforms. Parents have expressed a desire to be taught such strategies. Parents also need to train and show their young ones how to use social media in a non-harmful way (Burnette et al., 2018). According to Lewis et al. (2015), many parents who are less technologically savvy than their children feel their authority on social media management is questionable. Parents have also cited interference in typical family behaviour and undesirable practices in their children's online behaviour. All

parents should set some restrictions on the amount of time their children spend on the various social media platforms and educate them on the possible dangers and how to handle them.

Inside the classroom, teachers can demonstrate to students how harmful social media can be to them. One idea is for students to take their phones to class and record and total every message they receive within a specified period during a lesson. When students have their tally, they can be compared and discussed. One discussion could centre around how viewing and responding to the number of messages can cause disruption to activity and result in stress. Discussions can also centre around stress and anxiety for children who do not receive any or as many messages. Do they experience stress, feelings of loneliness, and unworthiness? Allow students to say how the constant messaging impacted their concentration and indicate the other negative effects they produced.

Conclusion

Further research on the impact of social media on youths' health needs to be undertaken. Youths themselves need to be educated about how to properly use these sources of communication and information present through social media without its use becoming an addiction. Research suggests that the overuse of Facebook and Instagram does cause negative health problems in youths; still there is little research into the links between the overuse of Snapchat and youth's psychological health. This research is needed given that the majority of youths cite Snapchat as their favourite platform. The youth need to be educated on how to become intelligent users of social platforms. They need to understand that both credible and non-credible material flows through the platforms. They need to understand how to effectively sift what they consume and manage the platforms rather than having the platforms manage them.

References

1. Ahmed, N., Quinn, S., Hancock, G., Freimuth, V., & Jamison, A. (2018, November 29).
2. Social media use and influenza vaccine uptake among White and African American adults. Vaccine, 36(49), 7556 – 7561.
3. Allcott, H., Braghieri, L., Eichmeyer, S., Gentzkow, M. (2019, January 27). The welfare
4. effects of social media. Retrieved from http://web.stanford.edu/~gentzkow/research/facebook.pdf
5. Anderson, M., Jiang, J. (2018, May 31). Teens, social media and technology, 2018. Retrieved from http://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/
6. Arain, M., Haque, M., Johal, L., Mather, P., Nel, W., Rais, A., …Sharma, S. (2013, April). Maturation of the adolescent brain. Neuropsychiatric Disease and Treatment, 9, 449-461.
7. Arora, T., Albahri, A., Omar, M., Omar, M. S.C., Ahmad, S., Taheri, S. (2018, October). The prospective association between electronic device use before bedtime and academic attainment in adolescents. Journal of Adolescent Health, 63(4), 451-458
8. Asano, E. (2017, January 4). How much time do people spend on social media? Retrieved from https://www.socialmediatoday.com/marketing/how-much-time-do-people-spend-social-media-infographic
9. Beyens, I., Frison, E. & Eggermont, S. (2016, November). "I don't wanna miss a thing:" Adolescents fear of missing out and its relationship to adolescents' social needs, Facebook use, and Facebook related stress. Computers in Human Behavior, 64, 1-8.
10. Burnette, B., Kwitowski, M. & Mazzeo, S. (2017, December). "I don't need people to tell me I'm pretty on social media:" A qualitative study of social media and body image in early adolescent girls. Body Image, 23, 114-125.
11. Burrow, A. L. & Rainone, N. (2017, March). How many likes did I get? Purpose moderates link between positive social media feedback and self-esteem. Journal of Experimental Social Psychology, 69, 232-236.
12. Chassiakos, Y.R., Radesky, J., Christakis, D., Moreno M.A., & Cross, C. (2016, November). Children and adolescents and digital media. Pediatrics, 138(5).
13. Cottrell, R. and McKenzie, J. (2011). Health

promotion and education research methods. Sudbury, MA: Jones and Bartlett Publishers.

14. DePaolis, K. & Williford, A. (2018, May). Pathways from cyberbullying victimization to negative health outcomes among elementary school students; a longitudinal investigation. Online Journal of Child and Family Studies, 27(5).

15. Fox, J. & Moreland, J. J. (2015, April). The dark side of social networking sites: An exploration of the relational and psychological stressors associated with Facebook use and affordances. Computers in Human Behavior, 45, 168 -176

16. Frison, E. & Eggermondt, S. (2017, October). Browsing, posting and liking on Instagram: The reciprocal relationships between different types of Instagram use and adolescent mood swings. Cyberpsychology Behavior and Social Networking, 20(10), 603-609.

17. Hamm, M.P., Newton, A.S., Chrisholm, A., Shulhan, J., Milne, A., Sundar, P., Ennis, H.,

18. Scott, S. & Hartling, L. (2015, June 22). Prevelence and effect of cyberbullying on children and young people; a scoping review of social media studies. Journal of the American Medical Association, 169(8), 770-777.

19. Hausmann, J., Touloumtzis, C., White, M., Colbert, J., & Gooding, H. (2017, June). Adolescent and young adult use of social media for health and its implications. Journal of Adolescent Health, 60(6), 714-719.

20. Kuehn, K. S., Wagner, A. & Velloza, J. (2018, September 14). Estimating the magnitude of the relation between bullying, e-bullying, and suicidal behaviors among United States youth, 2015. Journal of Crisis Intervention and Suicide Prevention.

21. Lenhart, A. (2015). Teens, social media & technology overview 2015. Retrieved from http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/

22. Lewis, A., Knight, T., Germanov, G., Benstead, M., Joseph, C., & Poole, L. (2015, September 23). The impact of family functioning of social media use by depressed adolescents: A qualitative analysis of the family options study. Front Psychiatry 6, 131.

23. Luna, K. (2018, August 10). Dealing with Digital Distraction. Retrieved from https://www.apa.org/news/press/releases/2018/08/digital-distraction.aspx

24. Mojtabai, R., Olfson, M., Han, B. (2016, December). National trends in the prevalence and treatment of depression in adolescents and young adults. Pediatrics, 138(6).

25. Murphy, E., Olson, M. & Miller-Regan, N. (2018). Semi-annual taking stock with teens survey. Retrieved from http://www.piperjaffray.com/private/pdf/2018_Fall_TSWT_Spring_Infographic_LARGE.pdf.pdf

26. National Center for Injury Prevention and Control. (2017, February). Leading causes of death reports 1981-2016. Retrieved from https://webappa.cdc.gov/sasweb/ncipc/leadcause.html

27. Oberst, U., Wegmann, E., Stodt, B., Brand, M.s & Chamarro, A. (2017, February). Consequences from heavy social networking in adolescents: The mediating role of fear of missing out. Journal of Adolescence, 55, 51-60.

28. Pornsakulvanich, V. (2017, November). Personality, attitudes, social influences and social networking site usage predicting online social support. Computers in Human Behavior, 76, 255-262. doi:10.1016/j.chb.2017.07.021

29. Przbylski, A. K., Murayama, K., DeHaan, C.R. & Gladwell, V. (2013, July). Motivational, emotional, and behavioral correlates of fear of missing out. Computers in Human Behavior, 29,1841-1848.

30. Royal Society for Public Health. (2017). #StatusOfMind: Social media and young people's mental health and well-being. Retrieved from https://www.rsph.org.uk/uploads/assets/uploaded/62be270a-a55f-4719-ad668c2ec7a74c2a.pdf

31. Shafer, L. (2017, December). Social media and teen anxiety. Retrieved from https://www.gse.harvard.edu/news/uk/17/12/social-media-and-teen-anxiety

32. Sherman, L., Payton, A.A., Hernandez, L.M., Greenfield, P.M. & Dapretto, M. (2016, May 31). The power of like in adolescence. Effects of peer influence on neural and behavioral

responses to social media. Psychological Science, 27(7), 1027- 1035.

33. Shapiro, L.A. & Margolin, G. (2014, March). Growing up wired: Social networking sites and adolescent psychosocial development. Clinical Child and Family Psychological Review, 17(1), 1-18. doi:10.1007/s10567-013-0135-1

34. Smith, A., Anderson, M. & Caiazza, T. (2018, March 1). Social media use in 2018. Retrieved from http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/

35. Sokol, S. (2013, February 20). Constant connection: The psychological impact of social media. Retrieved from http://www.ounewsbureau.com/?p=4314

36. Strickland, A. (2014, Fall Term). Exploring the effects of social media use on the mental health of young adults. Retrieved from http://stars.library.ucf.edu/cgi/viewcontent.cgi?article=2683&context=honorstheses1990-2015

37. Tamir, D. & Mitchell, J. (2012, May 7). Disclosing information about the self is intrinsically rewarding. Proceedings of National Academy of Sciences of the United States of America, 109(21), 8038-8043.

38. Twenge, J., Joiner, T., Rogers, M., & Martin, G. (2017, November 14). Increases in depressive symptoms, suicide related outcomes, and suicide rates among U.S. adolescents after 2010 and links to increased new media screen time. Clinical Psychological Science, 6(1), 3-17.

39. United States Department of Health and Human Services. (n.d.). Research design. Retrieved from the Office of Research Integrity https://ori.hhs.gov/content/module-1-introduction-what-research

40. Utz, S., Tanis, M. & Vermeulen, I. (2016, January 12). It is all about being popular: the effects of need for popularity on social network site use. Cyberpsychology, Behavior and Social Networking, 15(1), 37-42.

41. Walsh, B. (2017, September). Insta-Ready. Retrieved from https://www.gse.harvard.edu/news/uk/17/09/insta

42. Weaver, M. D., Barger, L. K., Malone, S., Anderson, L. S. & Klerman, E. B. (2018, October 1). Dose dependent associations between sleep duration and unsafe behaviors among US high school students. Journal of the American Medical Association, online content, 172(12), 1187-1189.

43. Weinstein, E. (2017, November). Adolescent differential responses to social media browsing: Exploring causes and consequences for intervention. Computers in Human Behavior, 76, 3960405.

44. Woods, H. C. (2016, August). #Sleeptyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. Journal of Adolescence, 51, 41-49. doi:10.1016/j.adolescence.2016.05.008

45. Wright, E., White, K. M., & Obst, P. L. (2018, January). Facebook false self-presentation behaviors and negative mental health. Cyberpsychology Behavior and Social Networking, 21(1), 40-49.

46. Verto Analytics. (n.d.). Most popular mobile social networking apps in the United States as of July 2018, by monthly users (in millions). Retrieved from https://www.statista.com/statistics/248074/most-popular-us-social-networking-apps-ranked-by-audience/