

HOW ARE SOCIAL MEDIA SITES (SNS) AFFECTING THE MENTAL HEALTH OF
OUR YOUTH?

By

KEVIN GREK

A capstone submitted to the

Graduate School-Camden

Rutgers, The State University of New Jersey

In partial fulfillment of the requirements

For the degree of Master of Arts

Graduate Program in Liberal Studies

Written under the direction of

Dr. Jon Cabiria

And approved by

Dr. Jon Cabiria

Camden, New Jersey

October 2019

CAPSTONE ABSTRACT

How Are Social Media Sites (SNS) Affecting The Mental Health of Our Youth?

By KEVIN GREK

Capstone Director:

Dr. Jon Cabiria

SOCIAL NETWORKING SITES (SNS) HAVE INCREASED THE RATE OF DEPRESSION AMONG THE YOUTH

In recent years, the Internet has revolutionized the way people communicate and interact. The youth form the highest percentage of Internet users and social networking sites (SNS). Recent studies have indicated that SNS usage can affect the mental health of users both positively and negatively. Excessive use of SNS has the potential to initiate and aggravate the signs and symptoms of depression, anxiety, and low self-esteem among some users¹. In other studies, SNS have been shown to positively combat the issues of mental health. This capstone paper will focus on the youth who are affected by their extensive use of SNS. Bias will be on the negative impacts, especially in relation to mental health issues this population will face. This capstone paper reviews the current literature to understand better the relationship between SNS use and mental health issues among the youth and recommends interventions that can reduce the risk of mental issues from SNS usage.

Keywords: Depression, Social Networking, Social Media, The Youth,

Psychological health

¹Kim, J. H., Seo, M., & David, P. (2015). Alleviating depression only to become problematic mobile phone users: Can face-to-face communication be the antidote?. *Computers in Human Behavior*, 51.

Table of Contents

1.0 Introduction	1
1.1 Situation Analysis.....	2
1.2 Research Gap.....	5
1.3 Objectives of Study.....	5
1.4 Research Questions	6
1.5 Research Approach.....	7
1.6 Assumptions	7
2.0 Literature Review	8
2.1 Social Networking Sites	8
2.2 The Influence of SNS use on psychological health of the youth	13
2.3 Depression	16
2.4 Association between SNS and Depression.....	16
2.5 Theories reflecting the Association between SNS Use and Mental Health Issues.....	19
3.0 Preventions for SNS Impact on Mental Health.....	24
3.1 Adult Supervision.....	24
3.2. Implementing Safety Policies.....	25
3.3 Self-Regulation.....	26
4.0 Recommendations.....	28
5.0 Conclusion	29
References	30

The Role of Social Networking Sites (SNS) In Mental Illnesses among the Youth

1.0 Introduction

An article in Time magazine observes that cases of depression and suicide rates among the youth in the U.S. are increasing². The author of the article noted that the cases of depression and suicides in the U.S. were highest for young adults aged 21-25, but were also significantly high for teenagers age 12-13 (47%) and 18-21 (46%)³. Thus, parties between 12 and 25 are at high risk of suffering from depression in the U.S. Such alarming trends cause reason for worry, especially considering that depression is among the leading causes of mortality among the youth and is expected to be the highest contributor to the global burden of disease by 2030⁴. Coupled by other psychological issues, such as low self-esteem, drug use, and anxiety, there is no denying that there is a significant problem being faced by the youth in the country that needs to be addressed.

Although many factors, such as drug use and bullying, have been associated with the onset of depression in youth, blame has been pointed to the potential influence of social networking sites (SNS) on the adolescent's psychological well-being⁵. The controversy surrounding the use of SNS continues to increase as their potential for negativity becomes clearer. These sites allow people from different backgrounds to interact with diverse, radical, and extreme ideas, personalities, interests and political viewpoints. With this comes the potential to intersect with people with bad intentions. Furthermore, these

² Heid, M. (2019). Depression and suicide rates are rising sharply among young Americans, new report says. This may be one more reason why. *Time*

³ Ibid

⁴ World Federation for Mental Health. (2012) *Depression: A global crisis*. Retrieved from https://www.who.int/mental_health/management/depression/wfmh_paper_depression_wmhd_2012.pdf

⁵ Primack, B. A., Shensa, A., Escobar-Viera, C. G., Barrett, E. L., Sidani, J. E., Colditz, J. B., & James, A. E. (2017). Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among U.S. young adults. *Computers in human behavior*.

sites have become a conduit for cyberbullying, trolling, and sexual harassment. The situation is not made any better by the lack of efficient policies and structures for preventing negative effects. Exposure to such negativity has the potential to have adverse effects on the youth in society. This risk is heightened by the overreliance on these sites, which escalates into addiction in some cases. This report investigates characteristics of SNS, and their role in initiating and aggravating mental illnesses, such as depression, among the youth in the United States. Information from the report can be a basis for the various stakeholders and government agencies to formulate strategies for reducing the prevalence of depression among the youth in the United States.

1.1 Situation Analysis

In this era of globalization, SNS are perceived as important influencers of modern living. Not only are they a conduit for communication across the world, but they are also a means of sharing cultures that can liberate and shape the way people live. Of all age groups, those most affected by its use are the youth⁶. The effect on these parties is significant because they are at a juncture in their lives that requires more practical outlooks on life, rather than virtual or theoretical. While SNS do offer a wider outlook at life, most of the content and interactions they provide are virtual as opposed to physical, but face-to-face (F2F) social interactions are more important for social development⁷. The result of reduced F2F social interaction is a reduced level of cognitive development,

⁶Huang, G. C., Unger, J. B., Soto, D., Fujimoto, K., Pentz, M. A., Jordan-Marsh, M., & Valente, T. W. (2014). Peer influences: the impact of online and offline friendship networks on adolescent smoking and alcohol use. *Journal of Adolescent Health, 54*(5)

⁷Lin, L. Y., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., ... & Primack, B. A. (2016). Association between social media use and depression among U.S. young adults. *Depression and anxiety, 33*(4).

which then increases the likelihood of developing psychological issues, such as depression⁸.

In relation to the above, the National Alliance of Mental Illness (NAMI)⁹ estimates that approximately 1 in 5 youth aged 13–18 (21.4%) suffers a severe mental disorder during these developmental years, while children aged 8–15, have a slightly lower but significant percentage at 13%. Alarming, 50% of all chronic mental illnesses begin between the ages of 14 and 24. Of these, 75% will have manifested when individuals enter young adulthood. The association of chronic mental illness with SNS may arise through a tendency to form virtual connections at the expense of physical ones, with physical connections being more important for social development. Furthermore, for these parties, it is easy to be addicted to SNS because of the trendy content they provide and the feeling of being connected to others across the world¹⁰.

The issue with SNS is that, in some cases, they to create a falsified and exaggerated feeling of being connected to other people. Notably, depressed or lonely parties may use these platforms to feel less lonely, which may result in their overreliance and addiction to these sites¹¹. For these parties, the virtual platforms only worsen their ability to work through their issues, which only places them at risk and making their conditions dire¹². While people may communicate and interact on these virtual platforms, it is difficult to

⁸Walther, J. B., Van Der Heide, B., Ramirez, A., Burgoon, J. K., & Peña, J. (2015). Interpersonal and hyperpersonal dimensions of computer-mediated communication. *The handbook of the psychology of communication technology*, 1, 22.

⁹<https://www.nami.org/learn-more/mental-health-by-the-numbers>

¹⁰Lin, L. Y., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., ... & Primack, B. A. (2016). Association between social media use and depression among U.S. young adults. *Depression and anxiety*, 33(4),

¹¹Kim, J. H., Seo, M., & David, P. (2015). Alleviating depression only to become problematic mobile phone users: Can face-to-face communication be the antidote?. *Computers in Human Behavior*, 51.

¹² Ibid

determine the realness of these interactions, due to the lack of the sensory cues present in face-to-face communications. Therefore, for a party having many friends online and not in real life, it can be difficult to get the companionship that real world interactions offer¹³. Considering that physical interactions are important for recovery, parties already depressed are more likely to benefit from face-to-face interactions as opposed to virtual ones¹⁴. Physical interactions offer companionship, while virtual ones only promote the creation of unrealistic, exaggerated, and, often, ideal selves. SNS users might hide their actual personalities, which is not ideal for forming realistic and lasting friendships in life¹⁵. While there are many cases of online friendships lasting, thus helping to solve the issue of loneliness, some parties may not be so fortunate. For these select few, the online platforms increases their loneliness as it is easier to maintain virtual relationships but harder to transform them into meaningful, real life relationships¹⁶. The risk is higher for the youth, whose psychological state may be quite delicate.

SNS help to propagate certain standards in the society that can cause both depression and loneliness. Most party's share exaggerated, choreographed, and edited images and videos of themselves online, which then align with some unspoken desirable standards in the society¹⁷. For parties that cannot reach such expectations, it is easy to feel insufficient and out of place. Such feelings then become a reason for being dissatisfied with life, which, for parties with low self-esteem, can then lead to isolation and depression. For the

¹³ Ibid

¹⁴ Ibid

¹⁵Yonker, L. M., Zan, S., Scirica, C. V., Jethwani, K., & Kinane, T. B. (2015). "Friending" teens: systematic review of social media in adolescent and young adult health care.

¹⁶ Ibid

¹⁷Brusilovskiy, E., Townley, G., Snethen, G., & Salzer, M. S. (2016). Social media use, community participation and psychological well-being among individuals with serious mental illnesses. *Computers in Human Behavior*.

youth, who need to feel they belong to the world they are being welcomed into, such feelings can be detrimental to their psychological health. In some severe cases, malicious parties online can use these standards as a basis for bullying and harassment, which further increase the risk of becoming isolated and depressed. As depression sets in, the position of the affected worsens as their feelings of insufficiency become exaggerated¹⁸.

1.2 Research Gap

Many scholars have researched the impacts of the continued use of SNS on the psychological health of the youth in the U.S. However, most of the sources used in this research do not explore much about the efforts that can be made to reverse these impacts, especially in relation to the growing cases of depression among the subject population. This capstone paper, will attempt to fill this knowledge gap by providing insights into the interaction between certain mental health effects, such as loneliness and depression, and social media use among the youth. The findings can then be the basis for future researchers to formulate possible interventions or preventive measures to help deal with the increasing cases of loneliness and depression.

1.3 Objectives of Study

The primary objective of this report is to identify the relationship between SNS and the rise of certain mental illnesses among the youth in the U.S. To achieve this objective, the researcher will consider the following secondary objectives.

- Evaluate the prevalence of SNS use among the youth in the U.S.

¹⁸ Ibid

- Evaluate the detrimental effects of the increasing use of SNS by the youth in the U.S.
- Identify the prevalence of loneliness and depression among the youth in the U.S.
- Identify gaps in knowledge related to the issue of loneliness and depression among the youth as is associated with SNS.
- Explore possible recommendations for the youth in the U.S. to help address SNS-related mental health issues

1.4 Research Questions

The research purpose is to explore the effects of social networking sites use related to loneliness and depression among the youth. To provide insights into the impact of the continued use of SNS by the youth, this paper will consider the various means through which SNS use affects individual mental health. Furthermore, efforts will be made to address the knowledge gaps mentioned earlier in this paper. The following research questions will help to shape the organization of this literature review as it seeks to address the issue of increasing cases of loneliness and depression among the youth and the connection to SNS.

Q1. What dangers does SNS use cause to the youth in the U.S.?

Q3. What is the relationship between SNS and loneliness?

Q4. What is the relationship between SNS and depression?

Q5. What are the alternatives for reducing the cases of SNS- related loneliness and depression among the youth in the U.S.?

1.5 Research Approach

This paper will be based on a literature review of different sources related to the problem of loneliness and depression among the youth, related to the use of social networking sites. The search covered the past 8 years of research up to 2019. To find the suitable literature, the search was limited to “SNS addiction among the youth in the U.S because the youth were the primary demographic for this study.”, “social media and depression among the youth in the U.S.”, “social media and loneliness”, “Social Networking Sites” and “Negative Impacts of SNS on the youth”. Of importance to the research will be the association between SNS and loneliness and depression. Some information will also be considered on the association between SNS and sleep deprivation, which also affects the psychological health of the youth in the U.S, and an correlate to issues related to loneliness and depression.

1.6 Assumptions

- All the youth are psychologically vulnerable. Parties with low self-esteem are most likely to be affected by most impacts of SNS use on self-image. However, considering the insecurities parties at this age face, there is always a potential for anyone in this population to experience these negative impacts.
- The paper focused on the negative impacts of SNS and the increased cases of loneliness and depression while ignoring many obvious benefits. Much has been done on these positive impacts. This paper chooses a different path and is, thus, biased in favor of these negative impacts.

2.0 Literature Review

The purpose of the literature review is to explore the nature of social networking sites, identify the risks of SNS and the association with loneliness and depression, and recommend evidence based interventions for prevention and reduction of loneliness and depression from SNS among the youth. To identify relevant research data, the literature review covers research published between 2010 and 2019 in various scholarly sources. Major keywords included in the search criteria are depression, loneliness, the youth, social media, social networking sites and mental illnesses.

2.1 Social Networking Sites

SNS's are defined as web-based services that allow individuals to construct a public or semi-public profile within a bounded system, communicate with other users within their connections and make connections with others within the system¹⁹. Mostly, the interactions are done through friend requests, status updates, photo sharing, public and private messaging, video and content sharing, and live updates. These interactions are quick, allowing the flow of information from one user to another user across the globe instantly. There are hundreds of SNS's worldwide that transverse regions, race, religion, social class, culture and education. The nature of connections within the SNS system varies from site to site. These connections can extend to family, close relatives, close friends, schoolmates, colleagues, and more often strangers from diverse cultural backgrounds across the world.

¹⁹Boyd & Ellison. 2007. Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication* 13:1. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>

In the U.S. more than eighty five percent of teens aged 13-17 spend a lot of time in social media sites such as YouTube, Snapchat, Instagram, WhatsApp and Facebook²⁰. Significant technological advancements have made it possible for more people to access these platforms. Today more portable devices, like smart phones, are common and easier to access; thus, being more preferred to the traditional personal computer set up. Almost 95% of 18-24-year-olds youth have access to cell phones with instant messaging, social apps and texting²¹. Among the frequently used SNS, Facebook leads with active members accounting for 85% of the global Internet use, followed by YouTube at 79% and Facebook messenger at 72%²². Other commonly used SNS include Twitter, Snapchat, and WhatsApp as shown in the Figure 1. Approximately 70% of the youth check at least one SNS several times a day, with almost 27% doing so every hour²³.

Figure 1. Most popular social media platforms in 2019²⁴.

The fact that SNS allow people to interact all the time from various locations across the world increases the feeling of being connected, but at the risk of failing to formulate meaningful relationships²⁵. This risk can cause individual social skills to reduce significantly, denying the development of meaningful conversations and increasing the need to be always “connected”²⁶. Furthermore, as people connect and make many friends online, their attention is spread thin. However, there is still a potential that among the

²⁰Pew Research Center (2018). Teens, Social Media & Technology 2018.

²¹Ibid

²²Ahmad, I. (2019). The most popular social media platforms of 2019. *Digital Information World*.

²³Pew Research Center (2018). Teens, Social Media & Technology 2018.

²⁴ Ibid

²⁵Walton, M., &Hassreiter, S. (2015). Real friends and fake friends: Research relationships in an era of global social media.

²⁶Turkle S. (2015) Reclaiming Conversation: The Power of Talk in A Digital Age. Penguin; New York, NY, USA

thousands of online friends one may have some can grow to be meaningful. Nonetheless, while one may have many acquaintances online, many are not significant enough and do not provide the emotional support actual physical friends can.

The youth still emphasize on maintaining their online presence so they do not “miss out” on information and trends being shared in the various SNS. The news and reports these platforms offer can enlighten users regarding various occurrences across the world. However, there are some instances where this information can be based on rumors and assumptions, thus causing confusion and misguiding individuals²⁷. Furthermore, the fact that people can move from one platform to the other means that not much attention or time can be given to any particular instance of knowledge being provided on a given site²⁸. That being said, credit should not be taken from sites that actually provide important, realistic information. The vast store of resources the Internet provides, and ability to share as provided by SNS, can make it possible to widen an individual’s perspective and knowledge of a given phenomenon²⁹.

The ability to be online and interact with people around the clock allows people to be “alone together”³⁰. This concept implies that people are isolated from their world physically but are able to interact with others and form virtual communities. Thus, while communication with the outside world is maintained, for some people face-to-face interaction is reduced significantly. Continuous SNS usage and the Fear of Missing out

²⁷Torres, R., Gerhart, N., &Negahban, A. (2018). Epistemology in the Era of Fake News: An Exploration of Information Verification Behaviors among Social Networking Site Users. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, 49(3),

²⁸Ibid

²⁹Brahimi, T., &Sarirete, A. (2015). Learning outside the classroom through MOOCs. *Computers in Human Behavior*, 51.

³⁰Turkle S. (2013) *Alone Together. Why We Expect more from Technology and Less from Each Other.* Basic Books; Philadelphia, PA, USA

(FOMO) in extreme cases result in an addiction to the digital space, which is analogous to substance addiction.³¹ This dependency can increase reliance on virtual communities as a means of interaction for some users, with some severe cases including people closing themselves off from the world completely. For such parties, face-to-face interaction is less preferred and uncomfortable, thus further enhancing their lonely tendencies.

The pressure not to miss out, but to stay informed of local trends and information creates the need for the youth to subscribe to the new norm of being technologically present³². For younger parties, some parents tend to support this tendency to stay indoors and connected as opposed to roaming outside in the unknown. The result is that these individuals are less likely to feel the need to interact with others outside when they are older and need to go into the world. For the few that are too engrossed in their online presence, these tendencies are supported, oblivious of the fact that human beings are social beings whose progress relies on the ability to interact, work with, and be around others³³. Without such interaction, loneliness sets in³⁴, resulting in the significant detriment of the individual's psychological well-being.

The need to fit in is a significant contributor to the increased use of SNS among the youth. People will always want to belong to a certain group. For the youth, this urge is heightened, and it is hinged upon their developmental process. Thus, one person may want to join a social media network to keep up with friends and groups they are eager to

³¹ Ibid

³² Kuss, D. J., & Griffiths, M. D. (2017). Social Networking Sites and Addiction: Ten Lessons Learned. *International journal of environmental research and public health*, 14(3), 311. doi:10.3390/ijerph14030311

³³ Ibid

³⁴ Kuss, D. J., & Griffiths, M. D. (2017). Social Networking Sites and Addiction: Ten Lessons Learned. *International journal of environmental research and public health*, 14(3),

be part of. Failure to do so can cause one to feel out of place with friends and acquaintances. However, in an attempt to fit into a given group, some parties can become addicted to these sites. Furthermore, not everyone will feel the positive impacts of using these sites to belong to a given group. In some cases, to fit into a given group can become the start of an overreliance on social media that might affect the healthy development of an individual's sense of self.

Overreliance, which can easily turn into addiction, has been correlated with mental illnesses. The extensive use of SNS and the integration into the daily life means that SNS can be a single most important activity that the youth engage in. SNS addiction can be reflected through behavioral addictive symptoms similar to those of substance abuse. This includes mood modification, withdrawal, salience and conflict.³⁵ Similarly, to substance abuse, SNS activities can be used to induce mood alteration and mood modifications. Preoccupation with the activities from these sites can also induce symptoms of intolerance to withdrawal. Withdrawal symptoms make it even hard to stop the addiction, which then makes it easier to relapse.

Addiction to SNS becomes problematic since the preoccupation denies the person the energy to concentrate and focus on other important things such as education or family social activities. In addition, SNS provides a platform for the youth to present their ideal selves without showing flaws and shortcoming. Introverts have also been shown to be more susceptible to SNS addiction as they use it for compensating the deficiency of offline social interactions³⁶. The youth with deficiencies in offline relationship tend to

³⁵Andreassen, et al. (2012,)

³⁶Kuss& Griffiths (2011)

have lower self-esteem and therefore have a higher risk of SNS addiction in an attempt to improve their self-image and identity. These psychological problems lead to problematic behaviors including the individual's lack of control within self and with others. As a result, the problems exacerbate into loneliness and depression or depressive symptoms.

2.2 The Influence of SNS use on psychological health of the youth

Youth, the age between childhood and adulthood, is probably one of the most delicate times in any individual's social development. Not only can parties in this stage of their lives be quite confused, but they might also be undergoing significant changes not only in their bodies, but also in their mental state, as is the case for adolescents³⁷. Thus, there is much importance offered to the role the environment, which consists of both living and nonliving things, in facilitating healthy development in both body and mind. In fact, it is at this point that an individual's path in life is forged. Psychologists argue that developing and maintaining healthy emotional and social behaviors affects the mental well-being of the youth. Thus, safe and supportive environments, including family, school, peers, and society are essential for proper mental development. The delicate nature of parties in this stage of life makes them quite susceptible to the impact of pressure caused by society, negativity, harassment, violence, and unrealistic expectations. Any exposure to such factors would likely have detrimental effects on the psychological wellbeing of these parties.

It has been scientifically established that getting enough sleep is beneficial to the physical and mental well-being of an individual. Enough sleep allows for sound decision

³⁷Graber, J. A., Brooks-Gunn, J., & Petersen, A. C. (2018). Adolescent transitions in context. In *Transitions through adolescence*

making, good concentration, as well as full engagement in everyday life. SNS platforms lead to information overload before bed. Most of the youth keep their phones and tablets at their bedside and spend hours looking at the bright screens in the dark. The availability of Internet and social media around the clock increases the probability of addictions that can progress late into the night. The global coverage these sites offer means that they have continuous action. For some parties, the option of being on these sites late into the nights is often irresistible. This observation is especially true for parties who have some level of addiction to these sites. The need to be online all the time causes them to forego sleep, or adopt unhealthy sleeping habits³⁸. Moreover, the sleep is interrupted by chirps, tweets, and beeps that serve as notices of incoming information. Eventually, insomnia may set in, which then affects psychological development. This effect, then, affects the ability to be productive during the day, which then affects confidence and enhances the likelihood of developing depressive tendencies. Sleep is further affected by the impact of digital devices on the eyes and the mind. Of importance is the blue light emitted by most screens, which has been observed to cause insomnia by increasing alertness and stimulating cognitive functions³⁹. Exposure to the gadgets during bedtime may negatively affect sleep patterns. In addition, blue rays increase the susceptibility to developing seasonal affective disorders such as anxiety and mood changes, which are predictors of depression.

³⁸Kaimal, D., ,Sajja, R. Sasangohar, F. (2017) Investigating the Effects of Social Media Usage on Sleep Quality. 61(1): 1327-1330. <https://doi.org/10.1177/1541931213601814>

³⁹Najjar RP, Wolf L, Taillard J, Schlangen LJ, Salam A, Cajochen C, Gronfier C. (2014). Chronic artificial blue-enriched white light is an effective countermeasure to delayed circadian phase and neurobehavioral decrements. PLoS One. 2014; 9(7):e102827.

Since human beings are social beings, being lonely is quite detrimental to their physical and psychological health. That being said, any aspect of society that encourages these feelings of loneliness is likely to cause feelings of depression and demotivation. This situation is a trap since once individuals become unmotivated and depressed; they become more comfortable with being lonely, which further worsens their position. The problem with being in this position is that being unmotivated will cause laziness, which then leads them to fail to consider seeking health. For the youth, this issue is a problem since it affects their ability to set themselves up in the society, which further worsens their position.

Although the aim of SNS is to communicate with others, many studies have reported that it also causes loneliness among the users. Due to the connection they offer, SNS are often an option for people wishing to bridge their lack of connection to the world. However, this approach does not offer a solution to the problem but instead diverts it by offering a temporary solution. Loneliness in real life is often caused by a lack of social skills. Opting to use SNS only offers the opportunity to interact with other people virtually but does not help to build interpersonal skills⁴⁰. Therefore, while loneliness may be resolved in the short run, individuals remain disconnected to the world and are likely to be even lonelier once detached from these sites and plunked into the real world. This effect is even worse for teenagers, whose interpersonal skills are yet to be developed. These effects might later manifest in youth, where the need to interact with others face-to-face is emphasized. The resulting inefficiency in interpersonal skills further enhances loneliness and sets the platform for depression to set in.

⁴⁰Pantic, I (2014) Online Social Networking and Mental Health. *CyberpsycholBehavSocNetw.* 17(10): 652–657. doi: 10.1089/cyber.2014.0070

2.3 Depression

Depression is a mental condition characterized by mood disorders resulting in feelings of sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, tiredness, and poor concentration⁴¹. The challenge with the condition is that it can not only last long, but that it can be recurring, thus having significant effects on an individual's ability to function at work or school or cope with daily life⁴². In some severe cases, the disorder can cause individuals to have suicidal or self-harming tendencies. A challenge is presented by the fact that no exact treatment works efficiently for all instances of depression⁴³. Instead, various interventions can be attempted to help an individual with this condition. Even then, recovery is not assured. Ultimately, wellness is entirely up to the individual with help and support from those around him/her⁴⁴, the failure of which can lead an individual down a dark path where the ability to perform various duties is severely impaired.

2.4 Association between SNS and Depression

There exists a link between SNS and depression among the youth. Several factors have been identified and used to establish the link between the two. Some of the factors include overreliance on SNS, which leads to addiction. Peer pressure to join the SNS is also a major factor. Additionally, the access to negative content on the sites is also a major issue of concern in relation to depression attributed to SNS.

Significant correlation has been found between the extensive use of SNS and depression among the youth in the U.S. This observation is especially true among the

⁴¹Tomlinson, G., & Slater, D. (2017). *Depression: A Cognitive Approach*. Routledge.

⁴²World Health Organization (WHO) (2014). Preventing suicide: A global imperative. WHO

⁴³ Ibid

⁴⁴ Ibid

youth in the modern world, whose lives are intertwined with their online presence. It should be noted that many good comes from the connectedness SNS offers various people. However, there is portion of the youth whose mental state is threatened by their overreliance on these platforms. Research has shown that excessive SNS usage may lead to symptoms traditionally associated with substance abuse⁴⁵ including withdrawal, mood changes, relapse and over-indulgence. In such cases where individuals are addicted to SNS, motivation in life is entirely dependent on the ability to use these sites. For these parties at risk, living in the virtual space is given importance over other important aspects of life, including interacting with family and friends personally. In fact, studies have suggested that for people used to using these sites, visiting them causes a surge in endorphins, thus creating sense of satisfaction and release, similar to what drug addicts get when they indulge⁴⁶. Therefore, when such parties fail to use SNS, then become less motivated in life, irritable, anxiousness, loneliness, and borderline depressed.

As popular avenues via which news and information are shared, SNS are important determinants of trends in the society. For the youth, who rely on these sites significantly, being able to keep up with the latest news, fashion, and music, among other things, can be an important determinant of an individual's state of mind⁴⁷. For these parties, being able to follow trends is an important determinant of one's ability to fit in and keep up with the latest trends. However, for parties that cannot do so, there is always the danger of being left out and lonely. Thus, despite being a conduit for connecting

⁴⁵Kuss DJ, Griffiths MD (2011) Online social networking and addiction--a review of the psychological literature. *Int J Environ Res Public Health.*; 8(9):3528-52.

⁴⁶ Ibid

⁴⁷ De Vries, D. A., & Kühne, R. (2015). Facebook and self-perception: Individual susceptibility to negative social comparison on Facebook. *Personality and Individual Differences*, 86, 217-221.

people, social networking sites can be an avenue for isolating others. Parties that cannot live up to pressure from their peers are always in danger of being iced out, which can then lead to depression.

On another front, being able to live up to peer pressure does not always have positive results. Certain trends propagated via social media can have dire consequences. As the youth attempt to impress their peers, they can engage in destructive behavior. For some these instances can lead to physical harm while others may be left with psychological injuries that later manifest as depression⁴⁸. Take the case of drugs, which are popularized and idolized through social media. Most of the youth are likely to try out drugs due to peer pressure and SNS provides a suitable media via which this pressure can be felt. For some, this pressure can be the start of a downward trend that leads to depression.

Overall, peer pressure, which is enhanced by SNS, has the potential to lead to depression. On one end, it can be a conduit for isolation and loneliness, which can lead to depression. On the other end, it can be a means of popularizing destructive behavior and ideas, which can lead to psychological harm. For the youth, these dangers are more likely as they are more susceptible to wanting to fit in. Eventually, this need can be means via which these individuals are exposed to harm.

⁴⁸ Huang, G. C., Unger, J. B., Soto, D., Fujimoto, K., Pentz, M. A., Jordan-Marsh, M., & Valente, T. W. (2014). Peer influences: the impact of online and offline friendship networks on adolescent smoking and alcohol use.

Additionally, the exposure offered by SNS means that it is harder to regulate the negative content spread across the Internet⁴⁹. Since the youth have a limited capacity to self-regulation and higher susceptibility to emotional abuse, they become more vulnerable to the negative effects of social media including the effects of being exposed to violent content⁵⁰. Among such negative exposure, include porn, racial views, and bullying. In real life, the society tends to protect the young, which includes adolescents. However, SNS do not offer such protection, with most parents being incapable of limiting the exposure their children have. As a result, the negativity associated with this exposure would lead to not only negative psychological tendencies, but can also trigger depression, especially when these individuals are the victims. These negative impacts according to the World Health Organization (WHO⁵¹) can increase depressive symptoms to the extent of suicide, the second leading cause of deaths in 15-29 year-olds.

2.5 Theories reflecting the Association between SNS Use and Mental Health Issues

There are a number of theories, which try to explain the association between SNS use and mental health issues. The theories focus on the psychological aspects pertaining to SNS use. Some of the theories include the cognitive behavioral model, and the social compassion theory.

Psychologists have explained the rise of over-reliance on SNS among the adolescence. The cognitive-behavioral model explains that SNS addiction stems from maladaptive cognitions that can be exacerbated by external factors. While the youth are

⁴⁹Turel O., Serenko A. (2012)The benefits and dangers of enjoyment with social networking websites. *Eur. J. Inf. Syst.* 2012;21:512–528. doi: 10.1057/ejis.2012.1.

⁵⁰O’Keeffe, G.S., Clarke-Pearson, K. 2011. The Impact of Social Media on Children, Adolescents, and Families. *Journal of Paediatrics* 127:4

⁵¹http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/

in the critical stage of self-identity and social identity, SNS sites interrupts the process by providing extensive resources⁵². In some instances, this confusion can cause the youth to fail to develop their self-identity, adapting to whatever suits a particular scenario.

However, even with this information, it becomes harder to practice, which might make it easier to handle the bombardment of information, because people are forced to rely on virtual interaction⁵³. As a result, the ability to form practical and interactions skills is disrupted thus setting the precedence for loneliness as these parties will find it harder to interact with others in the real world. Later in this paper, it will be identified that loneliness is an important factor contributing to the development of depression across all age groups.

Of importance in understanding, the pressure caused by SNS is the social comparison theory. The theory observes that people have a tendency to judge their self worth by comparing their position in life to that of their peers and others in life⁵⁴. As a result, when such comparisons indicate a significant shortcoming in an individual's progress, it is highly likely that the person would feel a reduced sense of self worth. According to Chou & Edge (2012), the perception that others are doing better in life as compared to an individual can lead to depressive symptoms. SNS are very effective in causing these feelings due to the platforms they offer people to share their position in life through status updates, photo, and video sharing. However, not many people take into consideration that these posts represent only a fraction of the said person's life, or a

⁵²Turel O., Serenko A. (2012) The benefits and dangers of enjoyment with social networking websites. *Eur. J. Inf. Syst.* 2012;21:

⁵³ Ibid

⁵⁴De Vries, D. A., & Kühne, R. (2015). Facebook and self-perception: Individual susceptibility to negative social comparison on Facebook

choreographed or edited version of it. Thus, it is easy for people that feeling that they do not have much going for them in life to compare themselves to these falsified representations. When such comparison return the perception that others are doing better than an individual does, then the person is very likely to feel like they are worthless or have not accomplished anything. If such feelings continue, then the individual may fall into depression. Alternatively, these individuals can indulge other destructive behaviors like drinking and substance, which further affect their mental state and sink them further into depression. In such instances, the platform, intended to connect people across the world and showing the value of different cultures eventually becomes a conduit for undermining one's position in life.

Furthermore, peer pressure associated with SNS can be used to popularize negativity. For the youth that are dependent on these platforms for interactions, it is common to share feelings and ask for advice from their peers through them. However, when these feelings are met by negativity and ridicule, which is common on online platforms, the effects on the individual can be dire. In one such instances, a parent accused Instagram and Facebook for the death of their adolescent daughter⁵⁵. According to the report, the adolescent suffering from depressive symptoms was encouraged to commit suicide through an Instagram handle *#suicide*. In such an instance, the power of the numbers these SNS offer can be observable. Not only can online trend be used to encourage good, but they can also be used to cause harm, especially when it involves ridicule towards sensitive parties.

⁵⁵<https://www.bbc.com/news/av/uk-46966009/instagram-helped-kill-my-daughter>

In a study to analyze how social media sites influence depressive symptoms among their users, many respondents indicated that other users were more content in comparison to the respondent. With a particular reference to Facebook, the impression that others were in a better financial, economic or social position than oneself has been indicated as the cause of depressive symptoms. The authors argue that social media users present themselves in a more favorable way through profile, photo updates, and personal posts in an attempt to gain a better perception from other users. Through a study conducted to evaluate the perception of Facebook users on profiles of people they knew or did not know, the results indicated that participants agreed that others were happier and had better lives. This included people that they did not personally know but whom they judge from their profiles⁵⁶.

SNS users maintaining interactions in more than one site have a higher risk of compromising their mental well-being. According to a study by Primack et.al (2017), research indicates that as the youth increase their accesses and interaction with different SNS, there is a higher likelihood of developing mental illnesses. The study conducted among the youth aged 19–32 from a national sample assessed the multiple use of social media and the increased risk of higher level of anxiety and depression. The youth were assessed on the number of platforms they have access to and the level of depression or anxiety. Participants with a high number of social media platform access had higher levels of depression and anxiety as compared to those with 0-2 social media platforms. The results indicated a linear relationship between the number of social media platform accessed and the level of depression and anxiety.

⁵⁶Primack BA, Shensa A, Sidani JE, Whaite EO, Lin LY, Rosen D, Colditz JB, Radovic A, Miller E. Social Media Use and Perceived Social Isolation Among Young Adults in the U.S.

Lastly, according to the same study, SNS, help to propagate certain self-images that leave out a significant portion of the population of their users. For parties that are not able to live up to these images, it is very easy to have their feelings of self worth reduce significantly. As a result, these parties may feel less confident and less motivated in their lives. Thus, they are likely to develop depressive tendencies, which then further weaken their self-confidence. Eventually, these parties become slave to their desire to meet these standards, and their inability to reach them further de-motivates them. Their inability to reach these unrealistic expectations may cause depression, especially among the youth, who tend to feel the need to be accepted. For the youth, their confidence in the world reduces, thus reducing their productivity and causing them to be depressed.

3.0 Preventions for SNS Impact on Mental Health

Young people of the current generation have grown with technology and are adapted to computer, mobile devices and the Internet from an early age. A study of Internet usage among the youth indicates that at age 15, an adolescent will have been using the Internet since age 10 for about 29 hours per week⁵⁷. Technology to them is a way of life, becoming impossible to separate them. In addition, the youth are increasingly using the Internet with more portable devices such as cellphones and tablets, making it harder for adult supervision. Internet providers have also increased the access to Internet where low control has been witnessed. The Internet availability at home, in the public libraries, public coffee shops and even public hotspots have made it difficult to implement interventions. Three interventions have been suggested to help the youth control their SNS usage and manage SNS associated depression.

3.1 Adult Supervision

Although adult supervision is highly recommended to assist, the youth maintain a healthy Internet use, changing technological advances makes it difficult for parents, school administrators and policy makers. Initially, pediatricians recommended two hours per day screen based media use (SBMU) that is no longer tenable due to the central role that the Internet plays in everyday lives of youth⁵⁸. The high access to computers and smartphones for academic, social and entertainment purposes complicates the adult intervention further.

⁵⁷ OECD (2017), PISA 2015 Results (Volume III): Students' Well-Being, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264273856-en>.

⁵⁸ Houghton, S., Hunter, Rosenberg, M., Wood, L., Zadow, C., Martin, K. and Shilton, T. (2015) Virtually Impossible: limiting Australian children and adolescents daily screen based media use. BMC Public Health 15:5 <https://doi.org/10.1186/1471-2458-15-5>

Three styles of parental mediation as a measure to limit the time spent on the SNS namely: instructive mediation, restrictive mediation and co-viewing⁵⁹. In instructive mediation, parents can guide the youth towards Internet and SNS safety by educating them. In restrictive mediation, parents influence the youth SNS usage through monitoring, filtering and blocking SNS sites. They can also set specific times when the adolescent can access Internet at home⁶⁰. Early monitoring during the adolescent development years helps the child develop healthy Internet and SNS usage. However, this intervention cannot be implemented for youth living away from home or during the hours they are away. Institutions should also develop digital literacy; to assist the young people recognize risks of excessive SNS usage. The skills should also strengthen emotional resilience to help them cope with cyberbullying and social comparisons while online.

3.2. Implementing Safety Policies

The law can also be more involved in protecting the wellbeing of the youth in the society as is affected by SNS. Policy makers have demanded that SNS providers design a range of consumer strategies that ensure the safety of their users. This includes banning underage children, providing safety tools and providing the users with guidance on SNS safety. Although the effectiveness of these policies have not been fully evaluated, policy makers continue to insist on more strategies to prevent the negative implication of SNS.

⁵⁹ Hwang Y., Jeong S. H. (2015). Predictors of parental mediation regarding children's smartphone use. *Cyberpsychology, Behavior and Social Networking*, 18(12), 737–743. doi:10.1089/cyber.2015.0286

⁶⁰ American Academy of Pediatrics. (2013). Children, adolescents, and the media. *Pediatrics*, 132(5), 958–961. doi:10.1542/peds.2013-2656

SNS providers should encourage self-regulation by ensuring that the users are aware of the safety messages, discouraged from sharing personal information and can report abuse. Several SNS providers have implemented such frameworks, for example, Facebook has a policy for reporting abuse and blocking/ un-friending problematic relations such as cyber bullies and unwanted relationships. Policy makers still need to work harder to ensure that SNS providers maintain safety measures and that standardization can be applied cross-nationally. In addition, the industry should ensure the technology fits the development of the youth by developing “age-appropriate” content and restricting content that pose risk to the mental health of the users. Apps that limit screen time for the young, SNS usage and time use have also been effective in managing SNS among the adolescent. Companies such as Facebook and Instagram are introducing such tools to mitigate the risk of SNS usage⁶¹.

3.3 Self-Regulation

Self-regulation involves empowering the users to take control of their SNS usage. The youth should be empowered and supported to use SNS properly so that they can enjoy the benefits there in. As an intervention program, researchers have recommended three ways to minimize SNS usage and thereby decrease depression. This includes cognitive reconstruction, reminder cards, and the diary technique. Users reconstruct the reasons why they spend time on the SNS, use reminder cards to help focus on other important things, and use the diary to record what they do on social media. These

⁶¹ King, D. et al. (2018), “Policy and Prevention Approaches for Disordered and Hazardous Gaming and Internet Use: an International Perspective”, *Prevention Science*, pp. 233–249, <https://doi.org/10.1007/s11121-017-0813-1>

techniques can be effective in understanding the negative consequences from SNS addiction and improve the mental well-being of the user.

Parents and guardians should discuss the SNS usage with the youth and adopt an approach that will yield results. Restriction in the era of digital necessity will only undermine the adolescence's ability to learn, explore and express themselves. Laxity on the other hand will expose the child to online risks and yield. Parental guidance can be applied through joint screen time or enhancing their participation in SNS. The youth should be empowered to take as much responsibility for their safety and mental wellbeing while interacting with the world. Institutions should also develop digital literacy; to assist the young people recognize risks of excessive SNS usage. The skills should also strengthen emotional resilience to help them cope with cyberbullying and social comparisons while online⁶².

⁶² Livingstone, S., M. Stoilova and A. Kelly (2016), Cyberbullying: incidence, trends and consequences, United Nations.

4.0 Recommendations

The findings of this research have indicated an association between SNS usage, loneliness, and depression. However, little research is available to indicate techniques that can be used to promote safe SNS usage and prevent SNS associated depression among the youth. Even after extensive research into the matter, it was impossible to find conclusive measures for limiting the impacts of SNS on the youth as far as their contribution to the cases of loneliness and depression are concerned. In all instances, several issues came up, including the difficulty of limiting use without infringing on the rights of individuals, the difficulty of separating use by adults from use by the young, the overlap between negative SNS content and positive ones, the increasing relevance of SNSs and the internet in the society, and the potential difficulty parents have in limiting their children using SNS. In this regard, it is recommended that further efforts be made to provide insights into these matters. Otherwise, the increasing cases of loneliness and depression will only get worse for future generations.

5.0 Conclusion

Technology advancement has been lauded as one of the successful invention of the last century. It has managed to optimize time and nurture human relationship across the globe. In particular, the Internet and social media have revolutionized the way people communicate. SNS usage has continued to grow exponentially with annual increases in number of users and the growth in SNS sites. Unfortunately, as SNS usage increases, researchers have found a negative influence of SNS to the mental health of the users, in particular the youth.

The youth, whose development stage is critical for the maturity of a complete self, have been at crossroads in developing social skills with the influence of SNS. SNS provides extensive resources that lead to confusion on developing self-identity and self-esteem. Since SNS sets no boundaries on the relationships that can be made on SNS, negative relationships can develop such as cyber bullying, intimidations and cyber trolling. In addition to harmful relationships, the youth are susceptible to emotional abuse as well as virtual peer pressure. Parents have also assumed the safety of the youth in the SNS. The safety of having the adolescent locked with their gadgets in their rooms has increased the parental assumption that they are safe. As a result, many of the youth grappling with SNS addictions continue to do so within the parental watch.

Without proper guidance from parents and policy makers, SNS sites continue to pressure the youth, leading them into loneliness, depression, and depressive symptoms. Interventions to reduce the SNS usage are needed and further studies are required to establish preventive measures for SNS associated loneliness and depression.

References

- Ahmad, I. (2019). The most popular social media platforms of 2019. *Digital Information World*. Retrieved from <https://www.digitalinformationworld.com/2019/01/most-popular-global-social-networks-apps-infographic.html>.
- American Academy of Pediatrics. (2013). Children, adolescents, and the media. *Pediatrics*, 132(5), 958–961. doi:10.1542/peds.2013-2656
- Andreassen CS1, Torsheim T, Brunborg GS, Pallesen S. (2012). Development of a Facebook Addiction Scale. *Psychol Rep*. 110(2):501-17. Doi: 10.2466/02.09.18.PR0.110.2.501-517
- BBC News. Instagram 'helped kill my daughter'. Accessed on 4th April 2019 from <https://www.bbc.com/news/av/uk-46966009/instagram-helped-kill-my-daughter>
- Boyd & Ellison. 2007. Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication* 13:1. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Brahimi, T., & Sarirete, A. (2015). Learning outside the classroom through MOOCs. *Computers in Human Behavior*, 51, 604–609.
- Brusilovskiy, E., Townley, G., Snethen, G., & Salzer, M. S. (2016). Social media use, community participation and psychological well-being among individuals with serious mental illnesses. *Computers in Human Behavior*, 65, 232–240.
- Chou, H.T, Edge, N. (2012) “They are happier and having better lives than I am”: the impact of using Facebook on perceptions of others' lives. *Cyber psycholBehavSocNetw*. 15(2):117-21. doi: 10.1089/cyber.2011.0324.
- Davila, J., Hershenberg, R., Feinstein, B. A., Gorman, K., Bhatia, V., & Starr, L. R. (2012). Frequency and quality of social networking among young adults: Associations with depressive symptoms, rumination, and co-rumination. *Psychology of Popular Media Culture*, 1(2), 72–86.
- De Vries, D. A., & Kühne, R. (2015). Facebook and self-perception: Individual susceptibility to negative social comparison on Facebook. *Personality and Individual Differences*, 86, 217–221.
- Giedd, J.N., Keshavan, M., Paus, T. (2009). Why do many psychiatric disorders emerge during adolescence? *Nat Rev Neurosci*. 2008 Dec; 9(12): 947–957. doi: 10.1038/nrn2513
- Graber, J. A., Brooks-Gunn, J., & Petersen, A. C. (2018). Adolescent transitions in context. In *Transitions through adolescence* (pp. 369–383). Psychology Press.

- Heid, M. (2019). Depression and suicide rates are rising sharply among young Americans, new report says. This may be one more reason why. *Time*. Retrieved from <http://time.com/5550803/depression-suicide-rates-youth/>
- Houghton, S., Hunter, Rosenberg, M., Wood, L., Zadow, C., Martin, K. and Shilton, T. (2015) Virtually Impossible: limiting Australian children and adolescents daily screen based media use. *BMC Public Health* 15:5 <https://doi.org/10.1186/1471-2458-15-5>
- Huang, G. C., Unger, J. B., Soto, D., Fujimoto, K., Pentz, M. A., Jordan-Marsh, M., & Valente, T. W. (2014). Peer influences: the impact of online and offline friendship networks on adolescent smoking and alcohol use. *Journal of Adolescent Health, 54*(5), 508-514.
- Hwang Y., Jeong S. H. (2015). Predictors of parental mediation regarding children's smartphone use. *Cyberpsychology, Behavior and Social Networking, 18*(12), 737–743. doi:10.1089/cyber.2015.0286
- Kaimal, D., Sajja, R. Sasangohar, F. (2017) Investigating the Effects of Social Media Usage on Sleep Quality. *61*(1): 1327-1330. Doi:1177/1541931213601814
- Kim, J. H., Seo, M., & David, P. (2015). Alleviating depression only to become problematic mobile phone users: Can face-to-face communication be the antidote?. *Computers in Human Behavior, 51*, 440-447.
- King, D. et al. (2018), "Policy and Prevention Approaches for Disordered and Hazardous Gaming and Internet Use: an International Perspective", *Prevention Science*, pp. 233–249, <https://doi.org/10.1007/s11121-017-0813-1>
- Kuss DJ, Griffiths MD (2011) Online social networking and addiction--a review of the psychological literature. *Int J Environ Res Public Health.*; 8(9):3528-52.
- Kuss, D. J., & Griffiths, M. D. (2017). Social Networking Sites and Addiction: Ten Lessons Learned. *International journal of environmental research and public health, 14*(3), 311. doi:10.3390/ijerph14030311
- Lin, L. Y., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., ... & Primack, B. A. (2016). Association between social media use and depression among U.S. young adults. *Depression and anxiety, 33*(4), 323-331.
- Najjar RP, Wolf L, Taillard J, Schlangen LJ, Salam A, Cajochen C, Gronfier C. (2014). Chronic artificial blue-enriched white light is an effective countermeasure to delayed circadian phase and neurobehavioral decrements. *PLoS One. 2014*; 9(7):e102827.
- National Alliance on Mental Illnesses. Mental Health By The Numbers. Accessed 4th April 2019 from <https://www.nami.org/learn-more/mental-health-by-the-numbers>

- OECD (2017), PISA 2015 Results (Volume III): Students' Well-Being, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264273856-en>.
- O'Keeffe, G.S., Clarke-Pearson, K. 2011. Clinical Report- The Impact of Social Media on Children, Adolescents, and Families. *Journal of Paediatrics* 127(4): 800-805
- Pantic, I (2014) Online Social Networking and Mental Health. *CyberpsycholBehavSocNetw.* 17(10): 652–657. doi: 10.1089/cyber.2014.0070
- Pew Research Center (2018). Teens, Social Media & Technology 2018 Accessed 4th April from <https://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/>
- Primack, B. A., Shensa, A., Escobar-Viera, C. G., Barrett, E. L., Sidani, J. E., Colditz, J. B., & James, A. E. (2017). Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among U.S. young adults. *Computers in human behavior*, 69, 1-9.
- Primack, B., César, A.S., Escobar-Vieraad, C., Erica et.al, 2017. Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among U.S. young adults. *Computers in Human Behavior*, 69,1-9
- Ranaeiy, S., Taghavi, M. R., & Goodarzi, M. A. (2015). The Effect of Loneliness on Social Networking Sites Use and Its Related Behaviors. *Global journal of health science*, 8(8), 53672. doi:10.5539/gjhs.v8n8p162
- Russell M. Viner; Elizabeth M. Ozer; SimonDenny; Michael Marmot; MichaelResnickAdesegunFatusi Candace Currie. (2012) Adolescence and the social determinants of health. 379:9826, 1641-1652
- Smith, A. & Anderson, M.(2018). Social Media Use in 2018. Pew Research Center: Internet, Science & Tech. Accessed 21st February 2019 from <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>.
- Tomlinson, G., & Slater, D. (2017). *Depression: A Cognitive Approach*. Routledge.
- Torres, R., Gerhart, N., & Negahban, A. (2018). Epistemology in the Era of Fake News: An Exploration of Information Verification Behaviors among Social Networking Site Users. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, 49(3), 78-97.
- Turel O., Serenko A. (2012) The benefits and dangers of enjoyment with social networking websites. *Eur. J. Inf. Syst.* 2012;21:512–528. doi: 10.1057/ejis.2012.1.
- Turkle S. (2013) *Alone Together. Why We expect more from Technology and Less from Each Other*. Basic Books; Philadelphia, PA, USA

- Turkle S. (2015) *Reclaiming Conversation: The Power of Talk in A Digital Age*. Penguin; New York, NY, USA
- Walther, J. B., Van Der Heide, B., Ramirez, A., Burgoon, J. K., & Peña, J. (2015). Interpersonal and hyperpersonal dimensions of computer-mediated communication. *The handbook of the psychology of communication technology*, 1, 22.
- Walton, M., & Hassreiter, S. (2015). Real friends and fake friends: Research relationships in an era of global social media.
- World Health Organization (WHO) (2014). Preventing suicide: A global imperative. WHO at http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/
- Yonker, L. M., Zan, S., Scirica, C. V., Jethwani, K., & Kinane, T. B. (2015). "Friending" teens: systematic review of social media in adolescent and young adult health care. *Journal of medical Internet research*, 17(1), e4. World Federation for Mental Health. (2012) *Depression: A global crisis*. Retrieved from https://www.who.int/mental_health/management/depression/wfmh_paper_depression_wmhd_2012.pdf