Facing the Truth about Social Media: Psychopathology among Social Media Users

Mirabelle Mattar*, Theresa Blatchford and Adekola Alao
Department of Psychiatry and Behavioral Sciences, Upstate Medical University, USA

Abstract
25% of teenagers use social media now. Technology can be used to learn new information as well as finding self-help techniques to have a better mental health as well as getting information that can be very harmful to the wellbeing.

This literature review addresses the benefits as well as the downsides of having social media in our lives.

This includes having a larger support network, being able to socialize, suicide prevention on one hand, as well as depression, cyber bullying, addiction, insomnia, psychosis and many more on the other hand.

INTRODUCTION

Following the modern spatial imaginary entitled “Psychopathologies of Modern Space”, Anthony Vidler talked about the history of “space”.

One way of tracing this history would be to check the expansion of territories and boundaries like Henri Lefebvre commonly did.

A second way would be to see the different forms of spatial representation, including the symbolic forms, creating a relationship between an individual “psycho physiological space” universal geometrical space, that Erwin Panofsky detailed.

A third way would be to describe the psychical, or interior space, and the space as projection like Sigmund Freud and Jacques Lacan did.

Social media provides a space for the mental life of modernity, which as defined by Georg Simmel, has its own psychic foundation of the urbanite individual: the "growth of nerve life, stimulated by the rapid uninterrupted exchange of internal and external impressions" [1].

Seventy-five percent of teenagers own cell phones. Of these, 25% use them for social media. Technology can lead to an increase in skills and social benefits but there is also the potential for harm such as sexting, cyber bullying, privacy issues, and Internet addiction, all of which can affect health.

With new innovations, there can be associated psychopathology, but there is often a time lag in detecting it.

The association of internet use with psychopathology has been well documented [2]. There have been findings that there are psychopathologies associated with social media use, on such sites as Facebook. This includes addiction, insomnia and psychosis as well as a report of Facebook precipitated suicide. In this report, we present data of reported cases and studies about social media-induced psychopathology.

METHODS

A Medline /pub med search using the key words, social media, Facebook, suicide, depression, psychopathology, insomnia, psychosis, mental health, mental illness. Articles retrieved were analyzed and the data is presented in categories.

RESULTS

Internet based therapy and use

Greater access to and use of the Internet by those with mental illness has led to considerations of technology based interventions. Things to consider are feasibility and impact, as well as ethical considerations [3]. Mental health care professionals are starting to incorporate Internet technologies into their professional lives, but they remain divided on the ethics and utility of using these technologies in clinical care, and practices and attitudes differ among clinicians with different levels of experience and in different settings of practice [4].

Preliminary evidence indicated that online and mobile-based interventions showed promise in improving positive psychotic symptoms, hospital admissions, socialization, social.
Central to inappropriate content. Pediatricians are in a unique position to monitor for problems with cyberbullying, “sexting,” and exposure to inappropriate content. One study found that internet delivered cognitive behavioral therapy is effective and acceptable for use in populations over 60 years old [7]. Moreover, internet-administered cognitive behavior therapy (iCBT) has been found to be an effective treatment for Social Anxiety Disorder [8].

Something else to consider is the potential usefulness of internet advertising to recruit participants for trials. Google advertising was successful in recruiting participants to a trial evaluating online depression intervention. Results suggest that Internet-based recruitment to mental health interventions is feasible and can be relatively affordable [9].

There are other ways that social media is being used to try to help improve health outcomes, reduce costs and decrease re-hospitalizations. One such example is “Louise,” a virtual patient-discharge advocate. Another example shows us a secure social networking community that is helping case managers better support patients who are on the road to recovery from addiction. Another description is of a hospital’s use of a virtual world to help train staff for emergency evacuation. It has been argued that social media can be used to deliver more patient-centered care and fluent care processes between patients and physicians [10].

**DEPRESSION**

It may seem that Facebook can fulfill a basic human need for social connection. However, current findings may suggest that Facebook undermines well being instead of improving it. One study showed that the more people used Facebook, the worse they felt the next time they were text messaged by investigators. Also, the more they used Facebook over two weeks the more their life satisfaction levels declined over time. These negative outcomes could not be predicted by interacting with other people directly, and were not moderated by the size of the person’s Facebook network, perceived supportedness and motivation for using Facebook, gender, loneliness, self esteem or depression [11].

There are many aspects of the relationship between depression and social media use that could be important to consider. Is there any relationship between social networking and depression? One study found that participants who were positive for depression based on their PHQ-9 score were more likely to display depression symptom references [12].

Some results indicate that online social networking is related to depression, and have shown a statistically significant correlation between Beck Depression Inventory scores and the time spent on social networking [13]. Other studies have not found evidence for a relationship between social media use and depression, and counseling patients or parents on the risk of “Facebook Depression” may not be warranted [14]. However, families should be educated and understand the importance of healthy internet use in their children, and be encouraged to monitor for problems with cyberbullying, “sexting” and exposure to inappropriate content. Pediatricians are in a unique position to help families with this. “Facebook depression,” sexting, and exposure to inappropriate content [1].

College students commonly display symptoms consistent with depression on Facebook, and it’s suggested that those who receive online reinforcement from friends are more likely to discuss depressive symptoms publicly on Facebook [15].

A study used an app called Emotion Diary which was believed to successfully evaluate depressive symptoms as well as provide useful tips and facts to users. It was demonstrated that the more depressed someone is, the more they will read tips and facts about depression. Depressed people also had significantly fewer interactions with others as measured by decreased number of friends and location tagging. These results could make it possible to examine Facebook activities to identify depressed individuals [16].

In addition, one study provided support that adolescents use public Web sites to display comments about their suicidal thoughts, behaviors, and possible intentions [17]. Studies have also shown that depressed people display more depressive symptoms references on their networking site.

At schools, programs that encourage resident advisors and peers to respond to a student’s signs of depression displayed on Facebook and to encourage treatment may represent a way to improve access to care for depression. In person communication would be the preferred way to raise such concerns [18].

It has been found that mental health references varied from being serious calls for help to jokes or attention-seeking behavior. Responses to mental health references depended on the participants’ offline relationship with the poster. Students would contact close friends through a phone call or in-person conversation, but would not approach acquaintances [19].

Another study using a Social Networking Peer Experiences Questionnaire highlighted the importance of examining the effects of aversive peer experiences that occur on social media. Negative social networking experiences were associated with youths’ symptoms of social anxiety and depression, even when controlling for traditional peer victimization [20].

Recent studies have shown that social wellbeing seems to play a bigger role than psychological health when it comes to negative effects from internet use. Although all psychosocial health variables (except for shyness) were correlated with generalized pathological internet use (GPIU), general loneliness was the only significant predictor of GPIU. Further there was a stronger correlation between the frequency of communicative services (most significant being chat rooms and “adult” websites) and GPIU as opposed to leisure or informational sites. It seems that GPIU is related to the social aspect of the internet and the unique environment to communicate in [21].

There are some examples in the literature of positive interactions and social improvement through the use of Facebook. Results showed that only for less extraverted individuals, chatting with peers found exclusively online directly predicted higher self-esteem and indirectly predicted less depressive symptoms through increases in supportiveness. It seemed that social media could help socially integrate more reclusive patients [22].
Suicide

Suicide prevention efforts may need to include Facebook and other social media. These websites can also be helpful in screening for high-risk individuals who do not voluntarily seek help at the clinics [23].

Fu KW et al concluded in their study that social media websites can help in suicide prevention but also can induce contagion of suicidal thoughts or acts [24]. In countries other than the Unites States, such as in South Korea where there are high suicide rates as well as immense use of social media, studies showed that social media data have a value in national suicide forecasting and prevention [25].

In the same intention of working on suicide prevention, Jashinsky et al wrote a paper about 1,659,274 tweets that were analyzed over a 3-month period with 37,717 identified as at-risk for suicide. The results showed that Midwestern and western states had a higher proportion of suicide-related tweeters than expected, while southern and eastern states showed the opposite. State Twitter-derived data and actual state age-adjusted suicide data had a strong correlation [26].

The American Association of Suicidology proposed 10 warning signs for suicide. The presence of these signs was compared in 215 postings on a suicide forum and 94 postings on a self-injury forum.

The scores showing the presence of the signs were higher on the suicide forum than on the self-injury forum. Moreover, 6 out the 10 signs seemed to be significantly more prevalent, including suicidal ideation, purposelessness, trapped, hopelessness, withdrawal, and, in the reverse direction, recklessness [27].

Further more, Ruder et al discussed in their study how suicide notes on social media networks can help prevent copycat suicides, through immediate interventions of other social network users [28].

About virtual identity suicide

Concerning another kind of suicide, which is the virtual identity suicide, Stieger et al found that Facebook quitters are significantly more cautious about their privacy, have higher Internet addiction scores, and are more conscientious than Facebook users. The main self-stated reason for committing virtual identity suicide was privacy concerns (48%) [29].

Homicidal activity has also been pursued in studies. The pedophilic nature of a murder was confirmed through the evaluation of a sentence used as a Facebook status [30].

Bipolar disorder

Martini et al reported in their study that patient with bipolar disorder have smaller social networks both in the real-world and on the Internet. They added that if in case they use the social networking sites, they tend to do it less frequently and have less knowledge of the networks compared to their same-generation peers [31].

Psychosis

Regarding psychosis, a romantic delusion was revealed through stalking behavior on social media networks, the delusion might have also been triggered by the presence of social networks [32].

Nitzan et al tended to assume that some features of computer mediated communication might contribute to the formation of psychotic experiences [33].

Krishna et al concluded that clinicians might benefit from incorporating questions concerning social networks behaviors in their assessment [34].

Addiction/substance abuse

Koc et al concluded that Facebook addiction can be predicted by weekly time commitment to social media, social motives for it, severe depression, anxiety and insomnia. These predictors were not affected by gender or demographic variables [35].

Insomnia was also addressed by Wolniczak et al, reporting that there is a relationship between Facebook dependence and poor quality of sleep [36].

A study in Germany estimated the prevalence of Internet addiction between 1 and 4.2% of the general population. It was interpreted with some limitations due to the lack of standard diagnostic measures. The prevalence was higher in the younger population. The prevalence for computer game addiction was of 0.9% and at 1.7% in adolescents [37].

The use of social media did not predict alcohol consumption and engaging in risky behaviors while the use of social media related to alcohol marketing did [38].

Alcohol use disorders recovery apps exist on the web, tracking drinking consumption as well as information about treatments [39].

Studies have also shown that social networks can be also used to assess the behavior of high stimulant-using and at-risk HIV populations, such as African American and Latino men who have sex with men (MSM). Research showed that participants using social networks to find sexual partners were more likely to have used methamphetamines within the past 12 months and that those who preferred to talk online compared to face-to-face had over 4 times the odds of methamphetamine use and over 6 times the odds of cocaine use within the past 12 months [40].

Another study followed adult methamphetamine users, showing that those who were contacted by phone or mail were different from the ones contacted through Facebook. The ones on Facebook were more likely to be younger, female, relocated out-of-state, and reported somewhat higher rates of anxiety and cognitive problems compared to the others [41].

24.74% of students had occasional or frequent problems including a decrease in real social participation and academic achievement, as well as relationship problems, while 2.02% of them were experiencing severe problems due to excessive time spent using social networking sites. This may be indicative of potential addiction [42].

Empirical studies suggest that Internet addiction is different from social network sites but that the treatment might be similar. As for the causes, social network sites addiction can be due to...
dispositional factors (e.g., personality, needs, self-esteem), although relevant explanatory socio-cultural and behavioral reinforcement factors remain to be explored. In addition to that, it is believed that social network addiction is related to addictive behavior, including substance use [43].

Self-report measures, including the Internet Addiction Test, via an online interface were used and showed that use of Facebook may contribute to the severity of symptoms associated with Internet addiction [44].

The Bergen Facebook Addiction Scale (BFAS) along with other scales were used to assess three reflecting each of the six core elements of addiction (salience, mood modification, tolerance, withdrawal, conflict, and relapse). It was concluded that high scores were associated with extended bedtimes and rising times. Also, they were positively related to Neuroticism and Extraversion, and negatively related to Conscientiousness [45].

One study showed through hierarchical regression analysis that Facebook addiction partially mediated the relationship between subjective vitality and subjective happiness [46].

Twitter conversations following two tobacco-related events in the media were monitored: (1) President Obama’s doctor announcing that he had quit smoking and (2) the release of a photograph of Miley Cyrus smoking a cigarette. Results showed that Twitter was filled with conversation related to tobacco. Future interventions may be able to use social media and major current events to raise awareness of smoking-related issues [47].

For instance, a semantic web platform called PREDOSE (Prescription Drug abuse Online Surveillance and Epidemiology), was designed to facilitate the epidemiologic study of prescription (and related) drug abuse practices using social media. PREDOSE uses posts and domain knowledge to facilitate the extraction of semantic information from User Generated Content (UGC), through combination of lexical, pattern-based and semantics-based techniques [48].

These forms of platforms are believed to help play a significant role in advancing drug abuse epidemiology in the future [49,50].

Moreover, new recreational drug phenomena such as “spice drugs,” mephedrone and naphyrone were all identified as emerging trends in forums and websites, providing information for researchers and health professionals [51].

Discussions on Twitter regarding prescription drug abuse online showed that users are surrounded by others who also discuss it—potentially reinforcing a negative behavior and social norm [52].

For instance, the use of Adderall as a study aid among college students was confirmed by a study focused on Twitter posts [53].

Therefore, having more comprehensive and modernized federal legislation is believed to be critical in seriously addressing youth Internet behavior [54].

**Insomnia**

The majority of adolescents involved in cyber-bullying were not involved in school bullying. With regard to the problems associated with school bullying, internalizing problems (insomnia, perceived social disintegration, psychological distress) were more prevalent in victims and bully/victims, whereas externalizing problems (general aggressiveness, antisocial behavior) were more common in bullies and bully/victims. A similar pattern was found in cyber-bullying where internalizing problems were characteristic of cyber-victims and cyber-bully/victims. Insomnia was elevated in the cyber-bully group which is specific to cyberbullying. General aggressiveness and antisocial behavior were more prevalent in cyber-bullies and cyber-bully/victims [55].

**Miscellaneous**

A study comparing hemodialysis patients with mail, Facebook and Twitter accounts with those that didn't found that the ones with accounts were younger, less depressive, had a better quality of life, had higher cognitive functioning and were more educated compared to patients who did not have these accounts. This also was true of hemodialysis patients who did internet based research about their disease. They were found to be less depressive, they had a better quality of life and sleep quality, had higher cognitive function and were more educated compared to patients who did not do internet based research [56].

Internet-based interventions have been found effective in treating depression, anxiety, phobias, and addictions [57]. A study showed that over 90% of women would use the Internet to learn coping strategies for Post-partum depression, and they expressed interest in web-based post-partum depression treatment [58]. A program called “Mamma Mia” was developed to try to reduce the risk of postpartum depression, as a preventive program. The effects of this program on depression and well-being will be evaluated in a large randomized controlled trial [59].

There may be different benefits based on whether people post actively or do not post. Breast cancer members who posted actively felt they received more benefits from online communities than those members who participated in social networking without posting. This included emotional support, helping other patients, and expressing their emotions. Those who did not post did also find a certain amount of peer support through online communities, especially with regard to advice and insight/universality [60].

It’s possible that blogging can predict feelings of connection to extended family and friends for new mothers. New mothers spent approximately 3 hours on the computer each day, with most of this time spent on the Internet. These feelings of connection predicted perceptions of social support, which then predicted maternal well-being. This was measured by marital satisfaction, couple conflict, parenting stress and depression [61]. “Social avatars” appear to be an important thing to consider in understanding the potential for social media to contribute to psychopathology. This is the idea that when using social media there is the self-selection of favorable material to represent the person. This composite online image is the social avatar [62].

Facebook intrusion was also linked to relationship dissatisfaction. Such things as jealous cognitions and surveillance behaviors are cited for this. There is a possibility of high levels

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**Email:** mattiar@agsstate.edu
of Facebook intrusion in romantic relationships leading to such things as jealousy and dissatisfaction [63].

CONCLUSION

Social media has advantages and potential including facilitating communication and free access to information. It also encourages sharing personal information, which may lead to negative consequences such as envy, jealousy, rage and cyber bullying. Social media as a means of communication can also encourage dangerous behaviors such as suicidal behaviors via the copycat syndrome.

If used appropriately, social media can be a powerful communication tool and can ultimately be a benefit to patients. However, as seen from the results above, there are potential difficulties that can be associated with social media use.

REFERENCES


Cite this article