#### **Review Article**

# Impact of Social Media on Psychological Health: Challenges and Opportunities

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#### **Abstract**

**Background and Aim:** During the past few years, social networking has become very popular. Currently, there is a lack of information about the uses, benefits, and limitations of social media for health communication in society.

**Material and Methods:** This paper will review some of challenges and opportunities to use social and their impact on psychological health. In this review we searched all valuable and relevant information considering the social media impact on psychological health. We referred to the information databases of Medline, PubMed, Scopus and Google scholar.

**Conclusion:** Social media brings a new dimension to health care, offering a platform used by the public, patients, and health professionals to communicate about health issues with the possibility of potentially improving health outcomes. More study is required to establish whether social media has impact on mental health in both the short and long terms.

Keywords: Social media, Psychology, Mental health, Technology

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### Introduction

Social media are defined as any form of electronic communication, which might refer as websites for social connection. Social media are also referred to as social networking. These technologies allow users to connect online with other users for sharing data and information, news, personal messages, ideas, as well as other content (photo and videos). Now more than 74 percent of adults (about half of humanity) use a social networking site worldwide<sup>1,2</sup>. Social media can be categorized by functions and purpose including social networking Twitter, Facebook,

WhatsApp Messenger, Google Plus, media sharing (YouTube), professional networking (LinkedIn), knowledge or information aggregation (Wikipedia), virtual reality and gaming environments (Second Life)<sup>3-5</sup>. The most popular social networking sites, including Facebook, LinkedIn, Instagram, YouTube, and Twitter, invariably foster user-generated content, real-time collaboration and social interaction<sup>6</sup>. Many social networking users are not only abundant, but also particularly engaged and active. For instance, more than three-quarter of Facebook users visit the network at least once throughout the day, with a quarter doing several times on a day<sup>7</sup>.

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Consistently, social media not only influenced peoples' personal lives, it also shape their personality. As a matter of fact, over the past few years, social media has been documented to affect various health behaviors in mass populations<sup>8</sup>. Clearly, social media users give some benefits from these tools, as demonstrated by their continued growth and popularity. The mentioned allegation also has scientific support, with many researches asserting positive psychological outcomes associated with the use of social networking. These advantages include the following enlarged social capital, personality formation, enhanced self-esteem and self-expression, as well as cognitive benefits related to executive functioning<sup>9, 10</sup>. However, it is clear that engagement with these technologies are definitely considered problematic when their use is associated with adverse psychological and mental outcomes. Such adverse outcomes notably led to addressed alcohol, tobacco and illicit drug use, cardiovascular disease, high-risk sex-related behaviors, anxiety, loneliness, depression, and several other health-related issues<sup>11-15</sup>.

Unquestionably, some connections between these variables, as described by a range of cross-sectional studies conducted by several authors, yet despite this, the direction of these associates remains unclear. Generally, it is difficult for investigators to recognize the psychological predictors of social media use, particularly when this use is associated with negative outcomes. The present review article conducted to explore the impact of social networks on psychological health of people as well as to discuss the well-established challenges and opportunities of these technologies for population health that could lead to adverse or appropriate effects.

# Uses and benefits of social media increasing social capital

Several authors have demonstrated that online connections may supplement or even replace inperson contacts, mitigating any loss from time spent online. As a matter of fact, evaluation of physical and geographical communities supported by online technologies have indicated that computer-mediated connections can confer positive effects on community involvement, interaction, and social

capital<sup>16,17</sup>. Several lines of evidence have supported that new forms of relationship characteristics and social capital will happen in online social networking, because online connection may be supported by approaches like photo directories and search capabilities. Social media also could significantly develop and improve weak ties, because these online tools is well-suited for maintaining such ties cheaply and easily<sup>18</sup>. Moreover, bridging of social capital by social media directs strong relationships with family members and close friends, which could be in a position to access to scarce resources and provide emotional support<sup>19</sup>.

### **Identity formation**

Social networking and popular media technologies are common resources from which adolescents and young people draw significant markers that define content of identity. Accordingly, novel online technologies play an imperative role in influencing the experience, social and personal selves<sup>20</sup>. Some authors have reported that the adolescents' use of social media results for how they think about themselves, their family members and peers, and then shapes their insights of group norms and behavioral intentions<sup>21,22</sup>. In addition, these online tools contribute to identity formation by simplifying reflexivity, or a manner of reflecting on how we see ourselves and how others see us<sup>23,24</sup>.

### **Enhancing self-esteem**

Some investigates have described role of social media and ability to socialize in supporting self-esteem. For instance, study conducted by Valkenburg et al., indicated that Facebook can enhance social selfesteem<sup>25</sup>. They showed that this social network contributes to direct perceptions of one's physical appearance, romantic appeal and close relationship, particularly when the Facebook users received positive feedback from their friends. Correspondingly, young people with low self-esteem may acquire significantly positive assistances from the social opportunities provided by these platforms. However, for selfesteem, researches have yielded mixed results. Additionally, many studies did not specify how social media use could be associated with self-esteem. On the other hand, although some authors reported positive relationships with various types of social media use, others found negative relationships, and yet other researchers found no significant relationships<sup>26,27</sup>. Therefore, it is believed that social self-esteem is more likely to be affected if social media are applied for communication than for information seeking.

### **Improving self-expression**

Self-expression ability is important and people progressively rely upon social media technologies to express themselves truly and accurately. The explosion in social networking sites is presented with exciting opportunities, mainly among younger cohorts<sup>28</sup>. Recently, a study by Orehek and Human was conducted to explore whether self-expression on the social media platform Twitter develops correct and positive social perceptions. They remarked that social media could be an effective approach for perfect self-expression of personality traits. They also demonstrated that self-expression on social media can develop both positive perceptions and begins to shed light on how to curate such perceptions<sup>29</sup>. Social media can facilitate correct selfexpression in their users. Self-expression of individuals on social media without strong privacy concerns might present an opportunity for people to share characteristics of themselves with less risk of disapproval or rejection than face-to-face interactions with their close social network<sup>30,31</sup>. Further researches should be conducted to explore what traits and characteristics are correctly and positively perceived on social media.

# Cognitive benefits of online social networking

A study conducted by Myhre *et al.* suggest that people who are socially active in social networking sites have better cognitive function than those who are disengaged and isolated. This research evaluated efficiency of using Facebook as an intervention to keep or improve cognitive function, particularly among older adults. As a consequence, it has been indicated that using an online social media site may develop some useful advantages for complex

working memory among a group of older adults<sup>10</sup>. This finding revealed the specific cognitive ability related to online social media and advantages of these tools among individuals. It also was described by Park et al. that using of social media in the context of cognitive training could provide domain-specific cognitive advantages. This study provided clear evidence that the memory function can improve by engagement in demanding daily orders<sup>32</sup>.

## Social media advantages in health care

Nowadays, physicians and pharmacists frequently use social media sites in which they can participate online communities to share and communicate with others regarding patient issues. In addition to the clinical aspects, data sharing in these sites provide various topics, such as ethics in medicine, biostatistics, politics, career strategies, practice management, and even dating in a health care setting<sup>33,34</sup>. For instance, surgical procedures can be followed by online technologies and queries can be asked via Twitter in real time<sup>35</sup>. The communication capacity delivered from social media are also being applied in order to improve clinical education. Widespread usage of social media by young people has been interested for clinical students' understanding of communication, ethics and professionalism. Social media tools may also positively influence the educational experience for nurses, according to the study by von Muhlen that they reported 53% of nursing schools are now using these tools<sup>36-38</sup>. Although it seems rational that using of social media for direct patient care can be associated with irreparable physicians and health care facilities are accepting risks of these approaches. Several surveys have recognized that clinicians have begun to express an increased interest in online interacting with their patients particularly in oncology practice<sup>33,39</sup>. In the recent years, several physicians use social media including Twitter, Skype and Facebook, to improve communication with their patients. Househ et al. reported that approximately 60% of physicians show an increased interest to online interact with patients via social media for the purpose of providing patient education and health monitoring<sup>33</sup>. Reliable evidence shows that online communication with

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patients can significantly improve their care and health outcomes. Additional data established that supplemental online communication and social media could facilitate physicians' advice and concoction for patients with chronic diseases<sup>40,41</sup>.

# Challenges and risks of Social Media Increasing loneliness and anxiety

Several studies suggest a link between using social media and loneliness. Social media and other socially interactive approaches may also have both positive and negative outcomes for socially anxious individuals. In a study conducted by Orr et al. on shy persons they found shy one spent significantly more time using social media than non-shy people<sup>42</sup>. In other research by Sheldon et al., it has been informed that people who are socially anxious like to use social media to fight loneliness<sup>43</sup>. A study documented that online communication could further isolate persons offline and decrease social wellbeing<sup>44</sup>. However, in a study has established that using online social media has a potential effect to improve social support and self-esteem while decreasing depression and loneliness<sup>45</sup>. Pittman et al., reported that loneliness might decrease, while satisfaction and happiness with life could increase as a function of image-based social media<sup>46</sup>. A study established that females tend to experience social anxiety more than do males<sup>47</sup>. Given this circumstance, it is not surprising that some authors reported that socially anxious females tend to feel more comfortable interconnecting with others online as opposed to in person<sup>48</sup>. Anxiety can be associated with increased dependency, emotionally lability, selfdeprecation, as well as preoccupation with the availability of others<sup>49,50</sup>.

## **Decreasing self-esteem**

Positive effects of social media in supporting selfesteem especially for people with low self-esteem discussed above but other researcher found that people with low self-esteem, express themselves in ways that are not lovely<sup>13</sup>. Such self-expressing is not reliable because people spend time with only their online friends compared with face-to-face interactions. In fact, people with low self-esteem realize social media as a more appealing place for self-disclosure and thus, they spend more time using these online approaches as do people with high self-esteem. Consequently, these online individuals cannot be able to express themselves in face-to-face interactions. It also has been noted that occasional or chronic exposure to social media platforms could be a negative impact on people's self-evaluation and self-esteem<sup>51</sup>. Ordinary chronic social media use can negative affect self-esteem, while state self-esteem can also be affected by incidental use. Our study shows that people who use social media commonly report higher depression rates and decreased well-being.

# Influence of social media on drinking, smoking, and illicit drugs use

Online social media websites have visual environment in which alcohol and illicit drugs-related content is easily generated and consumed by young adults<sup>52</sup>. Presented alcohol and drug abuse on social media can include any data (images and videos) pertaining to alcohol and illicit drugs that may negative effects viewers and be indicative of offline drug abuse<sup>53-55</sup>. In recent years, substance use is widespread and glamorized by celebrities on social media sites. There has been some evidence to confirm social media being used as an approach for selling drugs, with hashtags simplifying process of introducing sellers and buyers<sup>56</sup>. Alcohol, electronic cigarette and tobacco businesses have incorporated social media platforms into attractive marketing strategies that are accessible to adolescents and young adults<sup>57</sup>. These online tools have provided new insights for these industries to market to adolescents even when direct marketing to these individuals is in contradiction of the law or supposed to be national regulated. Expanding industries provide even more opportunities for adolescents and teens to have exposure to advertising through social media<sup>58</sup>. According to the study conducted by national center on addiction and substance abuse at Columbia university in 2011, it reported that teens and young people who used social media were more likely to used alcohol, marijuana, and tobacco than individuals who did not use social media frequently. Risk was higher for those who saw media of teens using or passed out from marijuana or alcohol<sup>59</sup>. Considering of these findings we can demonstrate a pathway from social media use to increased drinking and substance use.

#### Addiction to social media

In recent years, terms such as "social network site addiction", "social media addiction" and "Facebook addiction" have been used. A study conducted on social media addiction suggested that this issue associated with health-related, academic and interpersonal problems<sup>60</sup>. Cross-sectional studies propose that social media addiction is caused by dispositional factors, including personality, needs and self-esteem, although relevant descriptive sociocultural and behavioral strengthening factors remain to be empirically discovered. Wilson et al. indicted that low conscientiousness and high extraversion were consequences of social media-addictive tendencies<sup>61</sup>. Some investigations have conducted to evaluate psychosocial factors influencing social media addiction. Empirical studies have indicated strong relationships between social media addiction and interpersonal factors such as demographic characteristics, impulsivity, and personality traits based on the five-factor model and identity styles<sup>62</sup>-<sup>64</sup>. In a study conducted by Griffiths et al., Facebook addiction has been described by 6 pillars: usage typical dependency patterns, and profiles, motivations negative consequences, evidence of dependence and comorbidity<sup>65</sup>. However, social media addiction is not well-defined constructs yet, principally because there a no gold standard method to evaluate these conditions. Social media addiction may be related to gratification mechanisms and brain reward and it appears more usual among people with some personality traits and mood states, such as depression, anxiety, low self-esteem, narcissism, and seeking for an increased mood elevation<sup>66</sup>. Therefore, excessive social networks use are already important issues for treatment and research.

#### Conclusion

Rapid growth of social media platforms in recent years has developed a fantastic opportunity for relationship expansion by enabling individuals to connect with others by sharing their opinions, beliefs and experiences. As many surveys have indicated, this opportunity could be particularly valuable for people such as those with low self-esteem, whose interactions could use a boost, and whose self-protectiveness commonly makes them hesitant to self-disclose. Therefore, it has been recommended as an appreciated approach for relationship and communication between people all over the world. However, healthy and conscience social media technologies use is definitely distinguished with excessive use and lack of control, resulting an addiction with severely impacts the everyday life of many users, mainly young adults and teens. In conclusion, it is suggested that to incorporate social media use and other online behaviors into assessment procedures.

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### **Conflict of Interest**

The authors further declare that, they have no conflict of interest.

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