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Social Media and Mental Health in Adolescents and Young Adults: A Systematic Review

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Abstract

The prevalence of social media use is increasing in teens and young adults as are mental health issues, but what is the link? The use of social media among young adults and teenagers has rapidly increased every year since the onset of modern technology. Some researchers have found that social media use is associated with or affects favorable mental health outcomes, while others have found that social media use is associated with or affects unfavorable mental health outcomes. In this systematic review of twenty sources selected using CINAHL, Medline, and PsycINFO, evidence is analyzed and critically appraised to answer the following PICO questions: (1) In teens and adults, younger than 25 years, what is the relationship between social media use and mental illness? (2) In teens and adults, younger than 25 years, what is the effect of interventions, such as social media as a resource, on mental health promotion and well-being?

The use of social media has grown significantly over the past 10 years and continues to grow each year. It is estimated that in the United States, about 7 out of 10 people use social media to connect with others, receive news content, share information, and entertain themselves (Bekalu et al., 2019). This surge in social media use can be directly attributed to the increase and innovation of technology that has also occurred within the last 10 years. This is the first time in history where people have had access to different technology systems which can directly connect people to the internet and social media. While 7 out of 10 of all people use social media, there is a higher prevalence of use within the adolescent and young adult population, estimated at 90% of adolescents using social media regularly (O'Reilly et al., 2019). A study by Pew Research states that 95% of teens have access to smartphones, which can access the internet and social media (Anderson & Jiang, 2018).

Along with increases in various types of technology and the number of users of social media, the ways that people can use social media have expanded as well. Before this surge of technology and social media access, most young adults used social media for business orientation, creating, socializing, entertainment, status-seeking, communication, and information seeking. Young adults and adolescents tend to use social media more for entertainment, identity formation, social enhancement, and maintaining social connections (Bekalu et al., 2019).

Because of social media, people can connect with others and maintain these relationships without face-to-face interaction. Some researchers have linked this specific aspect of social media to mental health problems because when people connect without face-to-face interaction, they may not adequately fulfill the need for social connection (Rasmussen et al., 2020). Other researchers have found that the use of social media is important to young adults' developmental processes as they form identities (Berryman et al., 2017).

Along with social media use, the incidence of mental health problems among the young adult population has also increased in the past 10 years. Emerging adults, those who are between the ages of 18-29, are the group most likely to be diagnosed with mental illness (Rasmussen et al., 2020). One of the reasons that this age group has been linked to a higher prevalence of mental illness is the different life events and transitions they are going through. These transitions are often paired with lower social support, increased financial strain, and other challenging or negative life events (Rasmussen et al., 2020). Another more recent finding is that this increase in mental illness diagnoses could also be attributed to the increased use of social media by this group in their adolescence as well as into their adulthood (Rasmussen et al., 2020). It is important to recognize mental illness in young adults at an early stage because the signs and symptoms of these diseases can impact them for the rest of their lives in more ways. Mental

illness in young adults has been linked to future problems in work, social relationships, and physical health (Rasmussen et al., 2020).

The purpose of this systematic review is to review and appraise the evidence that others have found regarding the link between social media and mental illness in young adults. The review will answer the following PICO questions: (1) In teens and adults, younger than 25 years, what is the relationship between social media use and mental illness? (2) In teens and adults, younger than 25 years, what is the effect of interventions, such as social media as a resource, on mental health promotion and well-being? This systematic review is important to nursing, because if there is a significant link between social media use and mental illness in young adults, then nurses can begin to provide education about the effects of social media to combat some of the detrimental association and effects and in turn promote the beneficial ones.

Methods

The integrated review of literature describes both the positive and negative effects that social media plays in young people's lives and mental health. The search and review protocol is based on the Preferred Reporting Items and Meta-Analysis, or PRISMA, guidelines. Key search terms included mental illness, mental health, social media, young adults, nursing, education, depression, anxiety, and the definition of social media. Inclusion criteria were: publications within the past five years, 2015-2020, in English, primary sources, and research publications. Exclusion criteria included: publications published before 2015, not written in English, sources that were not primary, and publications not related to research. Sources include studies both from inside and outside the United States to show that this is a worldwide issue and expand the knowledge of it. The databases are CINAHL, Medline, and PsycINFO. Publications were selected based on relevance to our PICOT question. Publications retrieved through keyword

searches were 4,473. See PRISMA chart in Appendix A. Duplicates were removed automatically. One source from Pew Research was obtained outside of the criteria. Further screening for relevance included young adult, adolescent, and Boolean operators OR and AND; a total of 126 publications were retained. Full-text articles based on inclusion/exclusion criteria totaled 55 and studies included in this review are 20. Publications were searched in databases manually and were based on relevance to the PICO questions.

Integrated Review of the Literature

Description of Studies

Designs included qualitative, quasi-experimental, non-experimental, descriptive correlational, cross-sectional, and exploratory. Within the study designs, the level of evidence is three, four, and six. Sampling methods included convenience sampling and randomized. Sites included Australia, the Netherlands, the United Kingdom, New Zealand, Lebanon, Canada, as well as the United States, e.g. Connecticut, Utah, Pennsylvania, Texas, Washington, Florida, and Massachusetts. Sample sizes of the studies ranged from 16 to 1,787 participants. Some variables and measures were the amount of time spent on social media, type of mental illness, social media sites used, perceptions of social media use and mental health, and perceptions of applications to promote mental health and well-being. Internal validity was enhanced in some studies with random group assignment and external validity was enhanced with randomized sampling in some studies. Limitations included limited generalizability of findings to larger populations, small samples, self-reporting bias, and underrepresentation of different gender, racial groups, and specific mental health disorders. External validity is threatened by studies outside of the United States, due to cultural and health care differences, and in samples dominated by one gender or racial group. Gaps of knowledge across studies included

distinguishing the severity of mental illness, ways to track and measure the use of social media, and ways to implement social media as an intervention. Some findings were inconsistent and showed detrimental effects on well-being while others did not show conclusive evidence of detrimental or beneficial effects. Moreover, while some studies showed that there are significant positive relationships between social media use and anxiety/depression, others could not duplicate the findings, indicating that more research needs to be conducted. The review of literature was divided into three different sections. The first section describes studies about social media and how it has been defined by researchers. The second section describes studies related to social media, mental health, and the relationship between the two. The third section describes publications on the effects of social media on mental health.

Social Media

Before discussing social media and its relationship to mental health and how it can be used as an intervention, it is important to discuss how researchers have defined social media. Not all researchers consistently define the term *social media*, but most researchers commonly use the same websites and applications in their studies. For example, Anderson and Jiang (2018) from Pew Research looked at Youtube, Instagram, Snapchat, Facebook, Twitter, Tumblr, and Reddit in their study about the use of social media. In a qualitative study, Velozo & Stauder (2018), used a wider range of social media applications and examined the connection between social media use, mental health, and gender. The researchers defined social media as "any online platform that allows for teens to interact with one another. This included messaging apps (e.g. email, Whatsapp, Viber, chat rooms, etc.), social networking websites such as Facebook and Twitter, photo sharing apps (e.g. Snapchat, Periscope, Youtube, etc.), and online games such as Warcraft" (Velozo & Stauder, 2018, p.398).

Not only is it important to look at how researchers defined social media or social networking and what websites or apps they are looking at, but it is also important for researchers to investigate how participants use these social media platforms. For example, how a person uses social media can dramatically change how they view the effects that it has on their mental health as well as how much time they spend on that platform (O'Reilly et al., 2019). The way that people tend to use social media also needs to be considered when reviewing research that has been conducted on social media because it could potentially skew results if not acknowledged. For example, when O'Reilly et al., (2019) studied types of online support, they found that people often use social media for support because they maintain anonymity. The researchers used focus groups of adolescents aged 11-18 years, educational professionals, and health practitioners to explore the type of social support people can receive from others on an online platform, such as social media while remaining anonymous. They found participants saying things like "and I think a lot of people feel like if they speak out about their mental health they might get judged for it (p. 986)" when asked why they tend to go online to seek support from others. The study addressed this shame by acknowledging that anonymity in social media can offer a way to avoid the judgment and embarrassment that can come with discussing mental illness (O'Reilly et al., 2019).

Social Media and Mental Health

Some people that use social media believe that it can harm relationships and cause fewer face-to-face interactions (Anderson & Jiang, 2018). This can cause decreased social skills and feelings of loneliness and isolation, which can greatly affect mental well-being. Researchers have found that emerging adults and teens may be especially susceptible to the relationship between social media and adverse mental health variables (O'Reilly et al., 2018). For example,

Rasmussen et al., (2020) examined this relationship and found that young adults' social media may be related to problems with emotion regulation, which refers to one's ability to take control over their emotional state. The researchers concluded that "social media use may be a risk factor for mental health struggles among emerging adults, and that social media use may be an activity to which emerging adults resort when dealing with difficult emotions" (Rasmussen et al., 2020, p. 206).

Social media has also been researched to identify if there is a relationship between social media use and signs of mental health disorders such as depression and anxiety (Barry et al., 2017; Coyne et al., 2020; Lin et al., 2016; Velozo & Stauder, 2018). In general, these research studies have found that there is an association between social media use and depression as well as anxiety. For example, Lin et al. (2016) studied young adults, ages 19-32 years, and found a strong, positive significant association with social media use and depression. Therefore, as the use of social media increased, the rates of depression increased (Lin et al., 2016), findings were also supported by Barry et al. (2017), who also found a positive relationship between social media use and anxiety. Based on findings, the researchers have proposed that social media use could be used as a tool to identify those who potentially could be at risk for depression, as well as possibly a prevention tool (Lin et al., 2016). In contrast and using the ALT-SR model, Coyne concluded a negative relationship existed between social media use and symptoms of depression, but a positive relationship between social media use and anxiety, this relationship was demonstrated until reaching a peak at the age of 18. Therefore, as social media use increased, depression decreased, and as social media use increased, anxiety increased. When discussing this finding, Coyne et al., (2020) recognized that time spent using social media was moderately related to anxiety, but the finding was not related to depression. Another study found similar

evidence when researching teens ages 13-16 years old (Velozo & Stauder, 2018). It was originally thought that socializing and following people online, not known to the person, would be related to emotional problems, like anxiety and depression, but this was not the case.

Therefore, these researchers concluded no relation between looking at others' content and emotional symptoms (Velozo & Stauder, 2018).

A group of studies explored the relationships between social media and: depression, anxiety, stress, eating disorders, and other mental health disorders (Han & Myers, 2018; O'Reilly et al., 2018; Wilksch et al., 2019; Zeeni et al., 2019). In general, these researchers have found that in the young adolescent ages, there is a positive relationship between social media and these types of mental illness. For example, Wilksch et al., (2019) collected data from 996 adolescent males and females and researched the rates of eating disorders, social media usage such as Facebook, Instagram, Snapchat, and Tumblr, and the relationship between these variables in girls and boys. They found a significant pattern between usage of social media and eating disorders, concluding that as disordered eating increased, the amount of social media use increased for both boys and girls. Zeeni et al., (2018) also supported that social media was associated with unhealthy eating habits as well as stress in female undergraduate students. These research studies showed evidence that social media use is associated with unhealthy behaviors and that young individuals need to be aware of this to protect themselves from the harmful effects it can have on their mental well-being.

Although researchers have consistently found relationships between social media use and mental health in teens and young adults, they often do not examine how the individuals themselves think of its relevance to mental health and emotional wellbeing. An exception is a study where O'Reilly et al. (2018) recruited participants, aged 11-18 years old, from two cities in

the United Kingdom to ask these adolescents how they viewed social media. Adolescents described that social media was a threat to their mental health. The study identified three themes: (1) it was believed to cause mood and anxiety disorders for some adolescents, (2) it was viewed as a platform for cyberbullying, and (3) the use of social media itself was often framed as a kind of addiction (O'Reilly et al., 2018). Many adolescents reported anxiety from being separated by technology because they have developed a dependence or an "addiction" for it, which adds even more strain on one's mental health (Zeeni et al., 2018). Overuse of social media can also be associated with some issues; that is, social media can be fun, however, the individual can become overwhelmed with the demands of it (Han & Myers, 2018). Overuse changes the individual's perspective of social media because it can cause them to be strained. After all, they feel the need to keep up with posts and activities to continue those social connections with others (Han & Myers, 2018). These studies consistently show that there is a strong relationship between social media, depression, anxiety, stress, eating disorders, and other mental health disorders.

Researchers have also studied the relationship between social media use, social support, mental health, and emotional wellbeing (Bekalu et al., 2019; Hardy & Castonguay, 2018). In general, these researchers have both found positive relationships between social media use and wellbeing. For example, Hardy and Castonguay (2018) studied the relationship between social media use and emotional wellbeing and collected data from Facebook users. They found that social media use was positively associated with wellbeing, e.g., as social media use increased, emotional wellbeing increased in those under 30 years old. The findings were consistent with Bekalu et al. (2019) who found that routine social media use is positively associated with social wellbeing, positive mental health, and self-rated health.

Researchers have also studied the relationship between support from social media, loneliness, and depression and anxiety symptoms (Berryman et al., 2017; Barry et al., 2017). In general, researchers have found that the more social media accounts, as well as the frequency these accounts are checked, have a relationship with feelings such as loneliness. For example, Berryman et. al (2017) studied a group of 471 undergraduate students and asked them to selfreport on their social media behaviors. Results showed that the way young adults use social media is an outlet for their problems by "vaguebooking" meaning that the user posts a status with minimal information so that others will ask what is going on. Even though it may seem like the user is fishing for attention, it may be that they are sending a "cry for help" which can indicate a possible mental health issue that needs to be addressed. This social media posting strategy can be used as a coping mechanism for those young adults who suffer from mental illness but may not want to share it with everyone. This style of posting allows others to ask them what is wrong and if they need help. It is an indirect way of acknowledging loneliness and seeking help online. Barry et al. (2017) also researched social media behaviors in 114 adolescent-parent dyads, where adolescents were aged 14-17 years old. This study showed that social media activity (i.e. the number of accounts adolescents reported having and their self-reported frequency of checking social media) was moderately, positively related to loneliness as well as parent-reported anxiety and depression symptoms observed in their child (Barry et al., 2017).

Effect of Social Media on Mental Health

As mentioned previously, the way that adolescents and young adults use social media has changed dramatically within the past 10 years. Since there has been an increase both in social media use and mental illness diagnoses within this population, researchers have examined the effect of social media use in those who identify as having mental health problems. In general,

researchers have found that social media can be used to promote mental health well-being when seeking online support (Beard et al., 2019; Dewa et al., 2019; Gibson & Trnka, 2020; Naslund et al., 2017), and as a way to connect and be engaged in their health (Hanley et al., 2019; Van Rensburg et al., 2016).

One of the ways clinicians and researchers looked at social media is through online support. Using social media in this way, to connect with others and feel support affected positive mental health outcomes (Beard et al., 2019). Gibson and Trnka (2020) found that even though young people experience high amounts of mental health problems and distress, they are less likely to seek professional help than any other age group. This could be due to numerous reasons such as young people's investment in their autonomy, mental health stigma, and services that are inappropriate or inaccessible to young people (Gibson & Trnka, 2020). The researchers examined how online resources may decrease the stigma that young people face while trying to get help because of the anonymity and lack of judgment while being online. For example, almost all 21 participants had sought support while being online, and being online had helped them to be able to recognize distress and reach out to those who are expressing it without judgment from others (Gibson & Trnka, 2020). This finding is consistent with Dewa et al. (2019) who studied 21 participants, aged 16-21 and found that they also enjoyed using social media as a way to engage with others and express themselves. Many of the participants reported that being able to engage and communicate with other people (anonymously or named) outside of routine hours and with the almost certainty that someone would respond made them want to use social media (Dewa et al., 2019). They also said that being able to speak openly and without judgment about something important to them, specifically their mental health, was reassuring (Dewa et al., 2019). These findings are consistent with another study that focused on

interventions for mental health by using social media as an outlet for communication. Naslund et al., (2017) researched a group of 240 Twitter users who self-identified as having a mental illness in their profile. Two-thirds of the participants claimed to use social media to connect with others who are struggling with mental illness, while some used it to share their experiences and how they cope with mental illness (Naslund et al., 2017).

Other studies researched the ways that using social media allows young people to connect and be engaged in their health. For example, van Rensburg et al., (2016) researched with 20 participants who have a mental illness diagnosis such as anxiety and depression. These participants expressed interest in mental health services where they can connect with their mental health providers over social media and other online outlets. The benefits participants identified included having constant access to mental health providers, being more comfortable opening up, and the potential for ongoing monitoring (van Rensburg et al., 2016). That a social media application may help with mental illness was addressed in multiple studies (Dewa et al., 2019; Naslund et., al 2017) which all showed participants expressing interest.

People can also become more involved in their mental health by taking a break from social media and monitoring its use through other applications. Hanley et al., (2019) looked at the benefits of taking a "vacation," where participants would not log onto their social media accounts for a week, and identified two types of social media users. The researchers divided 78 participants into active and passive users of social media and selected 40 participants to refrain from accessing social media for a week. Active users were defined as people who were creating content and communicating directly with others, for example, posting status updates, commenting, chatting, and sharing posts, while passive users were defined as those who consumed other people's information without communicating with others. They were those who

browsed news feeds, followed others' communications, examined friends' profiles, and looked at photos without responding (Hanley et al., 2019). The pre-test results showed that there was a positive correlation with life satisfaction among active social media users. However, with passive users, there was no positive effect (Hanley et al., 2019). The researchers then gave the participants a post-test after the social media vacation and found that there was a lower positive effect for the active users and no effect for passive users. These findings were surprising and not what one would usually expect. It suggests that social media usage could be beneficial for active users and therefore taking a break would be contraindicated (Hanley et al., 2019).

Critical Appraisal

The purpose of this systematic review was to review and appraise the evidence that other researchers have found regarding the link between social media and mental illness in young adults. When looking at the evidence provided, it is important to recognize that there is limited and very little research that exists that fits the exact PICOT question that was researched. This is mostly due to narrowing the research found to fit the PICOT question and because the increased use of social media and the idea of mental health is related to this is a relatively new idea. This section will discuss the limitations of findings, reliability of findings, and analyze the methods researchers used in this systematic review.

Many researchers found that there was significant self-reporting bias for their participants (Barry et al., 2017, Beard et al., 2019, Bekalu et al., 2019, Coyne et al., 2020, Dewa et al., 2019, Gibson et al., 2020, Han & Myers, 2018, Naslund et al., 2017, O'Reilly et al., 2019). These studies had participants either under or over-reporting which could skew the results and make the link to adolescent social media use and mental health problems less accurate and harder to measure. Problems with self-reporting bias could arise when researchers do not use clinical

samples nor have physicians to confirm participants' claims of diagnoses of depression and anxiety. This specifically occurred in the study conducted by Coyne et al. (2020), and due to the lack of clinical samples, participants may have a self-reporting bias when discussing both their symptoms of mental health issues as well as their time spent on social media. Another way that there could be self-reporting bias is when there is not a clear link between reported versus observable behaviors, which occurred in the research of Barry et al. (2017). The research conducted by Dewa et al. (2019) consisted of participants with different technology experiences which caused the self-reporting to be biased. Also, the sample size of Dewa et al. (2019) was small, consisting of 16 participants, most of which were female. Similarly, Beard et al. (2019), found that they could not generalize the findings to all the inpatient psychiatric populations due to different levels of knowledge and access to smartphones. In the study by Beard et al. (2019), there was also no way to confirm the amount of smartphone usage time reported by participants, leading to a potential self-reporting bias. In the findings of Bekalu et al. (2019), there was also the possibility of self-reporting bias being an issue due to how common the internet has become and how sometimes people don't even realize how long they have been on the internet. The study conducted by O'Reilly et al. (2019) was biased because the participants were mainly healthcare professionals with some that were not. This study also had a large ratio difference of females to males. The research from Gibson et al. (2020) consisted of 21 participants and was inevitably skewed towards young adults who might be most comfortable in the online environments. This study's sample was older, which means they have different views of social media than a younger age group would have and are more experienced in managing online distress. Han and Myers (2018), studied participants' perceptions about their overuse and underuse of a social media site. These results could be biased simply because one might have

different definitions of overuse and underuse and the study was conducted by a survey questionnaire. Lastly, the study was about the usage of Facebook and did not include any other social media sites.

Some researchers did not find a clear link between social media and mental health issues (Anderson & Jiang, 2018, Berryman et al., 2017, Hardy & Castonguay, 2018). Hardy and Castonguay (2018), desired to research the relationship between social media and mental health. They used a sample size of 743 participants and only asked them one question associated with the use of social networks, "Have you ever felt you were going to have a nervous breakdown?" They found that those aged 18-29 and the use of social media was not related to nervous breakdowns (Hardy & Castonguay, 2018). Similarly, Berryman et al. (2017) found that "social media is a poor predictor of mental health problems and concerns about social media precipitating a mental health crisis may be unwarranted." Overall they viewed "how" people use social media as more important than "how long" people are on social media. They agree that there is a need for education about social media, but they acknowledge that their study found no clear link between social media and mental health issues among their participants. The research by Anderson & Jiang. (2018), also did not find a clear link between social media use and mental health problems in adolescents. They found that there has been increased use of both smartphones and social media among this population since the last survey was conducted in 2014-2015, but they found no clear consensus on how this group views social media as a whole.

Other limitations of studies and findings are focused on social media use in different ways. The research study conducted by Lin et al. (2016), wanted to understand the correlation between social media use and depression. The researchers focused more on how much the participants spend time using social media and how it affects their mental health. Whereas the

research study by Hanley et al. (2019) focused on the types of social media users (active or passive) and how that affected their social well-being. The study conducted by van Rensburg et al. (2016) looked at different forms of communication with providers on social media on mental health. This study had a very small sample size of 20 and provided minimal options of communication to select from.

Some researchers only used participants from certain age groups based on their current educational level (Zeeni et al., 2018, Rasmussen et al., 2020, O'Reilly et al., 2018). The limitation of both studies by Zeeni et al. (2018) and Rasmussen et al. (2020) was the sample of only college students from certain schools. The main limitation of the study conducted by O'Reilly et al. (2018) was using samples from only two separate high schools. The sample size of this study was also small in size, consisting of 54 participants.

Other limitations of studies included the lack of adolescent participation because of parental hesitation (Velozoa & Stauder, 2018 and Wilksch et al., 2019). Velozoa & Stauder (2018) surveyed the parents of the adolescents rather than the adolescents themselves. This can create untrue conclusions based on parental reporting. The study conducted by Wilksch et al. (2019) did survey adolescents, however, it required parental permission to do so. This surveying technique can also cause untrue conclusions because of parental hesitation in adolescent participation.

Synthesis

Based on the critical appraisal of the evidence above, it is proven that there is not a clear consensus with researchers on the link between social media use and mental health in people under the age of 25. This is probably due to the recent nature of social media and therefore many researchers have not been able to conduct their research to the full extent as other issues

contributing to mental health issues in this age population. Other reasons for this lack of consensus include homogeneous and non-diverse sample sizes used by the researchers as well as limited amounts of time to follow their participants to see how social media impacts their mental health later on in life. The homogeneous and non-diverse sample sizes mean that researchers were not able to generalize their findings to all people under the age of 25, which is another reason there is a disagreement between different researchers on the effect of social media on mental health in their targeted population.

Based on all of this, the current state of science suggests that there is a need for more research on the link between social media use and mental health issues in young people under the age of 25. When describing their studies, researchers such as Barry et. al, 2017, and Coyne et. al, 2020, acknowledge that there needs to be more research on the topic and some even suggest ways to increase the knowledge. These include not relying on self-reporting for both time and quality of time spent on social media, as well as signs and symptoms of anxiety and depression. While there is no current consensus if there is a link between social media use and mental health effects, it is important for nurses to know that there could be a link and to know how to educate their clients about it. Nurses and other medical staff need to keep up to date on this research to help their patients with mental health issues, or those with the potential to develop issues.

Recommendations for Practice and Research

Based on the review of the literature, it is evident that there needs to be more research done on the effects of social media on mental health in those younger than the age of 25. It is important to get this research done and have a clear answer on how social media affects young people since social media is such an important part of their lives. It is also very important to understand the consequences of social media in this age group since this age group is becoming

of age and starting to think more independently. It is recommended that researchers spend more time researching the topic and focus more on how this group uses social media. It is also recommended that researchers use more longitudinal studies to assess the long-term effects of social media. Another recommendation is to have future researchers find ways to limit the self-reporting bias on social media use and symptoms of mental health problems, to maintain accuracy and prevent biases within their studies. Lastly, future studies need to include larger and more diverse sample sizes, so that researchers can generalize their findings to relate to more people rather than the limited groupings prior.

As stated above, it is clear that more research is needed in this area of study, especially so that those in healthcare know-how to help adolescents with their mental health. With more research, there will be better nursing practice developed concerning this topic. A recommendation for future studies would be for them to include ways nurses will be able to effectively educate these adolescents so that they can protect themselves from mental health issues. Studies should also include strategies adolescents can use if they do experience mental health issues related to social media use, such as turning to support groups or using proper coping mechanisms. Overall, more research needs to be done so that nurses can expand their knowledge and practice to promote teenagers' and young adults' mental health and wellbeing.

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 https://doi-org.ezproxy.uakron.edu:2443/10.1002/da.22466

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Velozo, J. C., Stauder, J. E. A. (2018). Exploring social media use as a composite construct to understand its relation to mental health: A pilot study on adolescents. *Children and Youth Services Review*, 91, 398–402.

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8XJ5aWkcagSqbFvMSiFifzi0g0Cm_NDSgQ2bDlAoiLORbhOC839DhSQ0ioCrckiO84b

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Zeeni, N., Doumit, R., Abi Kharma, J., & Sanchez, R. M. (2018). Media, technology use, and attitudes: Associations with physical and mental well-being in youth with implications for evidence-based practice. *Worldviews on Evidence-Based Nursing*, *15*(4), 304–312. https://doi-org.ezproxy.uakron.edu:2443/10.1111/wvn.12298

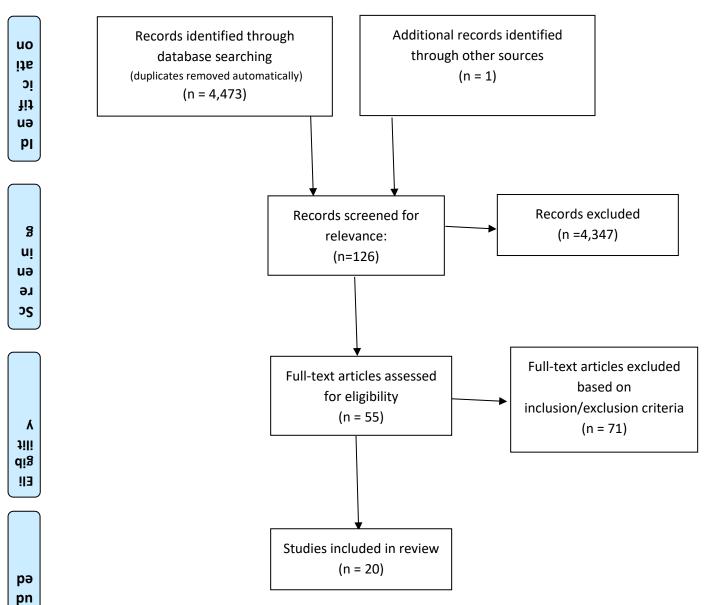
Appendix A



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PRISMA 2009 Flow Diagram



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit www.prisma-statement.org.

Appendix B

Systematic Review Table of Evidence

APA formatted reference	Purpose statement. Research question	Clinical practice, setting, sampling methods, sample size	Design. Level of Evidence	Findings, Conclusion	Practice and Research Implications	Critical Appraisal, Strengths, and limitations
Anderson, M., & Jiang, J. (2018). Teens, social media, & technology. Washington, DC: Pew Research Center https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/	Research was conducted in order to look at evolution since the last survey of teens and technology that was conducted in 2014-2015. It compares how many teens have access to smartphones now and what they perceive the effect of social media to be in their lives.	Used the NORC AmeriSpeak panel that is probability based and randomly selected US households to participate. The survey included interviews with 1,058 parents and who have children ages 13- 17 and then 743 teenagers 13-17.	Qualitative Level 6	More people have access to technology and smartphones than ever before but there is no clear consensus among teens about the effects of social media on their lives today. The apps used by teens have also changed since the 2014-2015 survey.	Since technology, social media use, and mental health problems have increased since the last study, people should be learning about ways to help this generation of individuals.	There is no clear consensus on how this age group views social media as a whole. The authors did recognize that some questions were worded differently than the last research in 2014-2015 which makes it not as clear why there was an increase in use of social media. This is a good source for seeing how the trends in social media have changed.

Hanley, S. M., Watt, S. E., & Coventry, W. (2019). Taking a break: The effect of taking a vacation from Facebook and Instagram on subjective wellbeing. PloS One, 14(6), e0217743. https://doi-org.ezproxy.uakron.edu:2443/10.1371/journal.pone.0217743	Does taking a week break from social media have a positive or negative effect on social well-being?	n=78 control group with no vacation=38 and group with vacation=40 Sample was those ages 18-48 years old. Participants were recruited using Prolific Academic (an online research participant pool; 66 participants), and Facebook pages associated with the University of New England, Australia (12 participants).	Quasi- Experimental Two group design Pre and post test interviews Level 3	At pre-test, more active SNS use was found to correlate positively with life satisfaction and positive affect, whereas more passive SNS use correlated positively with life satisfaction, but not positive affect. Surprisingly, at post-test the SNS vacation resulted in lower positive affect for active users and had no significant effects for passive users. This result is contrary to popular expectation, and indicates that SNS usage can be beneficial for active users.	We suggest that SNS users should be educated in the benefits of an active usage style and that future research should consider the possibility of SNS addiction among more active users.	People volunteered to take a break from social media instead of being randomly selected. There was a control group though to base results off of who did not take a week vacation. Final sample was small and more results could have been produced from a larger sample.
Velozoa, J. C., Stauder, J. E. A. (2018). Exploring social media use as a composite construct to understand its relation to mental health: A pilot study on adolescents. Children and Youth Services Review, 91, 398–402	Exploring the association between social media and mental health, specifically looking at the various activities within social media (i.e. posting, looking at other's content, videos etc) rather than general social media use and mental health as understood through the internalizing (i.e. emotional, peer) and externalizing (i.e.	A survey was distributed to parents (N = 72) with a teen between 13 and 16 years of age measuring mental health (i.e. SDQ, and CIU), and social media behavior.	Non Experimental design Level 6	Findings show that various social media activities are differently related to mental health. Socializing, online shopping, and following people one is not familiar with were significantly related to conduct	This study provides evidence that social media should be studied as a composite measure rather than a single measure so that we may have a better understanding of how specific social media activities relate differently to health	The sample size was relatively small and the sampling wasn't completely random. Questions were asked in a way that accurately reflects the different aspects of mental health

http://dx.doi.org.ezproxy.uakr on.edu:2048/10.1016/j.childyo uth.2018.06.039	conduct, hyperactivity) dimensions.			problems. Likewise, playing games, and posting content, specifically videos online were significantly associated with compulsive Internet use. However, no significant gender differences were found in the association between social media activities and mental health.		and had options of how they felt based on the question including "not true, somewhat true, and certainly true". These different answer options showed high internal consistency with other scales used.
Coyne, S. M., Rogers, A. A., Zurcher, J. D., Stockdale, L., & Booth, M. (2020). Does time spent using social media impact mental health?: An eight year longitudinal study. Computers in Human Behavior, 104. https://doiorg.ezproxy.uakron.edu:2443/10.1016/j.chb.2019.106160	Disparities across the literatures call for the ongoing study of adolescent social media time use as it relates to the development of anxiety and depression across time and development. We offer three guiding research questions to frame the current research study. RQ1. Is there a longitudinal, within-person association between the amount of adolescent social media time use and depression? RQ2. Is there a longitudinal, within-person association between the amount of adolescent social media time use and anxiety? RQ3. Does adolescent sex moderate the association	Families were primarily recruited using a purchased national telephone survey database (Polk Directories/InfoU SA). Families identified using the Polk Directory were randomly selected from targeted census tracts that mirrored the socio-economic and racial stratification of reports of local school districts. All families with	Descriptive Correlational Study Level 4	Incidences of both anxiety and depression symptoms increased over age starting at 13 and peaking at 18, with increased social media use over that time.	Time is an important factor when examining social media and outcomes (especially when applied to theories like the displacement hypothesis), and much of the research literature on this topic has focused on time use. However, we recognize that time use is not the whole story. We hope this study helps the research community and society as a whole to move beyond the screen time debate and instead to examine the context	Time spent on social media was self-reported and could be biased. Additionally, this was a non-clinical sample and participants self-reported their depression and anxiety. Though this is a common method to assess mental health, there may be some bias when using this method of reporting. Future research could obtain a more clinically based and professional way of assessing mental health. Social media may have a

	between time spent using social media and mental health?	a child between the ages of 10 and 14 living within target census tracts were deemed eligible to participate. N=500			and content surrounding social media use.	lingering impact on mental health that might appear later on in life, during a time of life our study did not examine
Lin, L. yi, Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., Hoffman, B. L., Giles, L. M., & Primack, B. A. (2016). Association between Social Media Use and Depression among U.S. Young Adults. Depression & Anxiety (1091- 4269), 33(4), 323–331. https://doi- org.ezproxy.uakron.edu:2443/ 10.1002/da.22466	Understanding the relationship between SM use and depression could allow the development of interventions or preventative strategies for at-risk populations.	Young adults (19- 32) recruited via random digit dialing and address-based sampling. Responses from 1,787 people	Descriptive Correlational Study Level 4	There is a strong and significant association with social media use and depression.	Social media could be used as a tool to identify individuals at risk for depression in order to provide intervention.	There was no gold standard to measure social media exposure. They used questions for how long someone uses social media as "5x a day" and should've asked how many times in an hour. No interview to ask if participants met clinical diagnosis of depression.
Rasmussen, E. E., Punyanunt-Carter, N., LaFreniere, J. R., Norman, M. S., & Kimball, T. G. (2020). The serially mediated relationship between emerging adults' social media use and mental well-being. Computers in Human Behavior, 102, 206–213. https://doi-	Social media use can negatively influence emerging adults' mental well-being. Therefore, this study explored the relation between social media use and mental well-being through difficulties with emotion regulation and perceived stress among a sample of U.S. collegestudent emerging adults.	Sample of U.S. college student emerging adults aged 19+ n=546	Non Experimental Descriptive correlational study Level 4	Results revealed that social media is indirectly related to mental health problems when emerging adults have difficulty with emotion regulation and perceived stress. The study also found that social media use is an outcome of	Social media is related to mental health problems, and adolescents use it to deal with stress. However, it can be used in a negative way.	Most participants were college students and it did not specify how large of a sample the study examined.

org.ezproxy.uakron.edu:2443/ 10.1016/j.chb.2019.08.019				difficulties with emotion regulation through the effects of these difficulties on perceived stress and mental-wellbeing. Lastly, it might be a maladaptive way to deal with negative emotions.		
O'Reilly, M., Dogra, N., Whiteman, N., Hughes, J., Eruyar, S., & Reilly, P. (2018). Is social media bad for mental health and wellbeing? Exploring the perspectives of adolescents. Clinical Child Psychology and Psychiatry, 23(4), 601–613. doi: 10.1177/1359104518775154 https://journals-sagepubcom.ezproxy.uakron.edu:2443/doi/10.1177/1359104518775154	The aim of this article is to investigate empirically how social media is viewed in terms of mental wellbeing by adolescents themselves. This aim is addressed by the question, What do adolescents think of social media and its relevance to mental health and emotional wellbeing?	Participants were recruited from schools in two cities in the United Kingdom, reflecting a broad diversity of socioeconomic and ethnic backgrounds. Six focus groups were conducted across 3 months in 2016 with adolescents aged 11–18 years old n=54 adolescents	Qualitative study Level 6	In conclusion, therefore, rather than demonising the process, the way forward may be for adolescents to be actively involved in the development of programmes that identify the way to successfully navigate social media and the Internet without a deleterious impact on mental health including sleep.	Indeed, digital technology is unlikely to go away, and it increasingly becomes integral to adolescents' lives	The exact sample size wasn't explained, rather just the number of groups and the age range
Zeeni, N., Doumit, R., Abi Kharma, J., & Sanchez, R. M. (2018). Media, technology use, and attitudes: Associations with physical and mental well- being in youth with implications for evidence- based practice. Worldviews on	The present study aimed to investigate the use of different types of technology and media, attitudes toward them, and how they relate to physical and mental wellbeing in Lebanese university students.	Sample of 244 undergraduates completed a self- report measuring media and technology use and attitudes, eating related variables, trait	Descriptive correlational, cross- sectional design Level 4	The use of mobile multimedia correlated with unhealthy eating and stress. Social media use was associated with BID, EDs risk, and the self-control	Practical implications are discussed in terms of setting limits and boundaries on technology use during childhood and adolescence, and encouraging healthy eating and physical	The sample took participants from different university campuses which was good, the sample size was fair.

Evidence-Based Nursing, 15(4), 304–312. https://doi- org.ezproxy.uakron.edu:2443/10.1111/wvn.12298		emotional intelligence (TEI), and psychopathology indicators (stress, anxiety, and depression)		construct of TEI. Anxiety of separation from technological devices and dependence on them was associated with increased BID, EDs risk, depression, and anxiety	activity at home and on college campuses. Moreover, social media could be used as a platform for intervention and prevention programs to decrease BID, EDs, depression, and anxiety.	
Han, B., & Myers, C. (2018). Perceptions of overuse, underuse, and change of use of a social media site: definition, measurement instrument, and their managerial impacts. Behaviour & Information Technology, 37(3), 247–257. http://web.a.ebscohost.com.ezp roxy.uakron.edu:2048/ehost/de tail/detail?vid=11&sid=14078b a0-efb6-4550-ad7c- 8dd79808cb83%40sdc-v- sessmgr03&bdata=JnNpdGU9 ZWhvc3QtbGl2ZQ%3d%3d# AN=2018-08380-004&db=psyh	This study examines someone's perceptions about their overuse, underuse, and change of use of a social media site. The measure how the relationship between a user and social media can be impacted by their usage.	Includes adolescents, adults, and middle aged people. n=182 students responses to survey questionnaire	Descriptive study Level 4	The data showed that people feel estranged from a social media site that they perceive to be overused, underused, or used for non-social purposes.	Depersonalization can have a strong negative effect on the users continuance of the social media. The findings can provide several practical implications for a social media site user retention management	They conducted a survey only about the usage of Facebook, it did not include any other social media sites.
Barry, C. T., Sidoti, C. L., Briggs, S. M., Reiter, S. R., & Lindsey, R. A. (2017). Adolescent social media use and mental health from adolescent and parent perspectives. <i>Journal of</i>	Are parent-reported symptoms of inattention, hyperactivity/impulsivity, conduct problems (i.e. symptoms of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD)), depression, and anxiety	n= 226 people with 114 adolescent-parent dyads Mean age for adolescents was 15 years and the age range for	Qualitative Study Level 6	FOMO is a new concept related to adolescent research but it was relevant in this study. The more social media accounts that adolescents have,	It is clear that further understanding of the temporal relations between social media activity and youth adjustment is needed as is more investigation of	The smaller sample size and the high amount of white/caucausin participants reduces the degree to how

Adolescence, 61, 1–11. http://ezproxy.uakron.edu:204 8/login?url=http://search.ebsc ohost.com/login.aspx?direct=t rue&db=psyh&AN=2017- 51672-001&site=ehost-live	related to the reported number of adolescents' social media accounts and the frequency with which adolescents report checking their social media accounts?	study was 14-17 years.		the more likely they are to experience FOMO.	contextual and intrapersonal influences on adolescents' social media experiences. The apparent role of FoMO or stress regarding events on social media, its potential interpersonal consequences, and the ever-increasing ubiquity of social media make this issue one of clinical and developmental importance.	this study can be used to generalize all adolescents. It cannot be determined how well parent- and adolescent report match actual observable behaviors on variables such as parental monitoring, frequency of checking social media, and adolescents' behavioral functioning.
Wilksch, S. M., O'Shea, A., Ho, P., Byrne, S., & Wade, T. D., (2019). The relationship between social media use and disordered eating in young adolescents. International journal of eating disorders, 53, 96–106. https://journals-ohiolink-edu.ezproxy.uakron.edu:2443/pg-99?306346332899045::NO::P99_ENTITY_ID,P99_ENTITY_TYPE:287306667,MAIN_FILE&cs=3y-8XJ5aWkcagSqbFvMSiFifzi0g	Thus the primary aim of this research was to explore rates of DE (cognition and behaviors), SM usage (Facebook, Instagram, Snapchat, and Tumblr), and the relationship between these variables in youngadolescent girls and boys	Data from 996 Grade 7 and 8 adolescents (n = 534 girls; M age = 13.08) was investigated. DE cognitions (Eating Disorder Examination- Questionnaire [EDEQ]), DE behaviors (Project Eating Among Teens), and SM use measures related to Facebook, Instagram,	Cross- sectional study, exploratory study, and correlational study Level 4	This exploratory report found that both DE and SM usage were common and significantly associated in young-adolescent girls and boys. Rates of DE cognitions and behaviors were higher than comparably aged samples in recent Australian studies, though these studies used other measures of DE behaviors	A clear pattern of association was found between SM usage and DE cognitions and behaviors with this exploratory study confirming that these relationships occur at younger-age than previously investigated.	A large number of young adolescents participated but it was based on whether or not the parent allowed it. Contained a variety of different SES and schools involved.

0Cm NDSgQ2bDlAoiLORbh OC839DhSQ0ioCrckiO84bxV YFToHqhmOwfFs0w		Snapchat, and Tumblr were completed				
Hardy, B. W., & Castonguay, J. (2018). The moderating role of age in the relationship between social media use and mental well-being: An analysis of the 2016 General Social Survey. Computers in Human Behavior, 85, 282–290. https://doi-org.ezproxy.uakron.edu:2443/10.1016/j.chb.2018.04.005	The relationship between social media and mental health is a very popular topic of research. It examines the relationship.	Ages 18-29 and 30+ n=743	Nonexperime ntal study, correlational study Level 4	For the ages 30+, the number of social networks one uses is positively related to them reporting they have felt like they were going to have a nervous breakdown. However, it is negative with those 18-29.	This study analyzed data from the 2016 General Social Survey	Only asked the participants one question, "have you ever felt you were going to have a nervous breakdown?"
Gibson, K., & Trnka, S. (2020). Young people's priorities for support on social media: "It takes trust to talk about these issues." Computers in Human Behavior, 102, 238–247. https://doi-org.ezproxy.uakron.edu:2443/10.1016/j.chb.2019.08.030	The purpose was to advance an understanding of how online peer support networks operate and, in particular, to explore how they work for young people who might use them in unique ways. This has the potential to inform the design of online interventions that can reach young people more effectively. The study also	Ads were placed online and through posters where young people gather. n=21 ages 16-21 years of age	Qualitative Level 6	During the interview most participants identified themselves as people who predominantly supported others online but almost all had sought support for themselves at times. Our analysis reflects this dual positioning of participants as givers and receivers of	Online interventions may need to identify the more oblique signals of distress that young people use in online communication and, again, may explore the possibility of using peers to identify a person in distress on the basis of their prior	The sample in this study was inevitably skewed towards those young people who might be most comfortable in online environments. There may be other people who have different views of social media and

	offered an opportunity to try out an innovative digital messaging interview method to examine young people's social media practices.			support, conceptualising support as a reciprocal process rather than a unidirectional activity. Furthermore, while some data extracts reflected the standpoint of the person providing support and others, the perspective of the person receiving it, there were common priorities that allowed us to identify themes that cut across the experience of both giving and receiving support.	knowledge of them.	even within the sample there was some variation in the extent to which participants valued online support. This group of participants is also relatively older and likely to be more experienced and competent to manage distress online than younger adolescents. While this particular group of young people is unlikely to be representative of all those who use social media for a variety of different purposes, their accounts do illuminate ways in which social media might be used to provide support for people experiencing distress.
Dewa, L. H., Lavelle, M., Pickles, K., Kalorkoti, C., Jaques, J., Pappa, S., & Aylin, P. (2019). Young adults' perceptions of using wearables, social media and other technologies to detect worsening mental health: A qualitative study. PLoS ONE,	The study aim is to explore the i) acceptability and ii) feasibility of wearables, social media and other technologies to detect mental health deterioration in young people with a mental health diagnosis.	Purposive sample of young people (18-25) with a diagnosis of severe mental health condition (16 participants) n=16	Qualitative Study Level 6	Wearables and/or mobile apps using regular real-time feedback to detect worsening mood, sleep and/or activity levels as signs of deterioration, delivered through self-report or an automated	There is potential for technology to help supplement existing mental health service provision and get people access to help earlier.	Participants had varied experiences in using different technologies-self-reporting could have bias, underrepresentati on of diagnosis of psychosis in young people,

14(9), 1–14. <u>https://doi-org.ezproxy.uakron.edu:2443/10.1371/journal.pone.0222655</u>				programme (sleep and activity only) were deemed generally acceptable and feasible to young patients		most of the participants were female (81%).
Berryman, C., Ferguson, C. J., & Negy, C. (2017). Social Media Use and Mental Health among Young Adults. Psychiatric Quarterly, 89(2), 307–314. https://doi-org.ezproxy.uakron.edu:2443/10.1007/s11126-017-9535-6	Could reliance on social media for social interactions pejoratively influence reallife social contacts, leading to isolation and loneliness? Could social media use isolate people from close contact and communication with others, thereby decreasing empathy? And could overuse of social media lead to larger problems with mental health including suicidal ideation? The current study aims to address some of these questions in a relatively large sample of young adults.	Sample was 471 undergraduate students attending a University from the southeastern region of US (mean age was 19.66). n=471	Descriptive Correlational Study Some control variables Level 4	Our results revealed that, overall, social media use is a poor predictor of mental health problems and concerns about social media precipitating a mental health crisis may be unwarranted. The exception was vaguebooking, which predicted loneliness and suicidal thoughts. It is possible that some forms of social media use may function as a 'cry for help' among individuals with preexisting mental health problems.	Children and parents do need to be educated in the negative effects of social media, but there has not been evidence that social media is the root cause of all sociopersonal problems.	Limitations were not clearly identified in the article. Hard to relate study to all young people because most participants were white, female, college students. Instead of all the measures used predeveloped scales that could be replicated in other studies, vaguebooking and time spent on social media were questions developed by the researchers but they were not disclosed in the article.
Bekalu, M. A., McCloud, R. F. & Viswanath, K. (2019). Association of social media use with social well-being, positive	These studies focus on measuring frequency and duration of use, and have seldom considered users' emotional connections to	Sample of 1,027 American young adults n=1,027	Descriptive Correlational Study Level 4	Data showed that while routine use is associated with positive health outcomes,	The link between social media use and health can be measured in terms of dose-effect relations	This study uses a large sample size and examines the associations between the use

and the behavior of

social media usage.

mental health, and self-rated
health: Disentangling routine
use from emotional connection
to use. Health <i>Education</i> &
Behavior, 46, 69–80.

http://web.b.ebscohost.com.ez proxy.uakron.edu:2048/ehost/ detail/detail?vid=3&sid=55bc7 e10-c803-4799-b4c6c1cd5c6ef392%40sessionmgr1 01&bdata=JnNpdGU9ZWhvc 3QtbGl2ZQ%3d%3d#AN=13 9773638&db=rzh social media use and the effects associated with such connections. By using a scale with two dimensions capturing users' integration of social media use into their social routines and their emotional connection to the sites' use, the present study has brought preliminary evidence that may help map where social media use, as a normal social behavior, may be considered beneficial or harmful.

emotional connection to social media use is associated with negative outcomes. The strength of the associations vary between socioeconomic and racial/ethinc subgroups. There is a link between social media use and health.

of social media and one's mental health. The study focuses on measuring the frequency, duration, and emotional connection to social media use. The measures they used were mostly selfreported measures that are inherently liable to inaccuracies of under- or overreporting. They also note how common the internet is to use which can contribute to the self-reporting bias- whether they mean to or

not.

O'Reilly, M., Dogra, N., Hughes, J., Reilly, P., George, R., & Whiteman, N. (2019). Potential of social media in promoting mental health in adolescents. Health Promotion International, 34(5), 981–991. https://doi- org.ezproxy.uakron.edu:2443/ 10.1093/heapro/day056	The growing prevalence of adolescent mental disorders poses significant challenges for education and healthcare systems globally. Providers are therefore keen to identify effective ways of promoting positive mental health. This aim of this qualitative study was to explore perceptions that social media might be leveraged for the purposes of mental health promotion amongst adolescents aged between 11 and 18 years.	Focus groups conducted with 54 adolescents aged 11-18, 16 educational professionals, and 8 mental health practitioners were asked about their views on the value of social media	Qualitative study Level 6	Three themes were identified: social media appears to have potential to promote positive mental health, adolescents frequently utilize social media and the internet to seek info about mental health, and there are benefits and challenges of using social media in this way. Conclusion: despite challenges of using social media and the risks, it does offer a useful way of education and reaching adolescents to promote wellbeing.	Social media can be used as a resource for adolescents and educate them on the effects of social media use on their mental health.	The study involves three groups of people to get different points of view on the use of social media. However, the sample size of participants is not that big.
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Naslund, J. A., Aschbrenner, K. A., McHugo, J. G., Unützer, J., Marsch, L. A., & Bartels, S. J. (2017). Exploring opportunities to support mental health care using social media: A survey of social media users with mental Illness. Early Intervention in Psychiatry, 13, 405–413. http://ezproxy.uakron.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=29052947&site=ehost-live	We surveyed social media users who self-identified as having a mental illness to learn about their use of social media for mental health and to identify opportunities to augment existing mental health services.	We asked 240 Twitter users who self-identified in their profile as having a mental illness to participate in an online survey. The survey was in English and inquired about participants' mental health condition, use of social media for mental health and interest in accessing mental health programs delivered through social media.	Exploratory study, non experimental and descriptive Level 4	Young adults age ≤35 and adults age 36 to 65 showed many similar demographic and clinical characteristics and patterns of social media use. The majority of participants from both age groups expressed interest in accessing programs for helping people with mental illness delivered through social media.	This exploratory study demonstrates the feasibility of reaching social media users with mental illness and can inform efforts to leverage social media to make evidence-based mental health services more widely available to those in need.	A convenience sample was used and participants were chosen if they specifically expressed their mental illness on social media.
Beard, C., Silverman, A. L., Forgeard, M., Wilmer, M. T., Torous, J., & Björgvinsson, T. (2019). Smartphone, Social Media, and Mental Health App Use in an Acute Transdiagnostic Psychiatric Sample. <i>JMIR MHealth and UHealth</i> , 7(6), e13364. https://doiorg.ezproxy.uakron.edu:2443/10.2196/13364	This study aimed to (1) characterize general smartphone app and social media usage in an acute transdiagnostic psychiatric sample with high smartphone ownership, (2) characterize current engagement and interest in the use of smartphone apps to support mental health, and (3) test demographic and clinical predictors of smartphone use.	Participants included 322 patients receiving treatment at a partial hospitalization program (PHP) located in a nonprofit, insurance-based, academic psychiatric hospital in New England from September 2017	Qualitative Study Level 6	74% of participants said they would want an app to monitor their mental health and 81% said they would be willing to use said app. 63% of participants acknowledged that social media was harmful to their mental health. Around 48% said they already have	Although it is not a focus of this study, some of our findings provide support for ongoing efforts toward utilizing phone use behaviors (eg, number of social media posts, number of phone calls made, and Global Positioning System location,) in detecting mental illness phenotypes,	Since all patients in the hospital program completed the measures, this study is able to generalize to other psychiatric populations but can not be generalized to areas where smartphone ownership is lower. There was

		to March 2018. n=332 and mean age was 33		an app used for mental health and endorsed these apps as being supportive of their mental health.	deterioration, or relapse.	also no way to accurately confirm smartphone use, which means there could have been a self- reporting bias.
van Rensburg, S. H., Klingensmith, K., McLaughlin, P., Qayyum, Z., & van Schalkwyk, G. I. (2016). Patient- provider communication over social media: perspectives of adolescents with psychiatric illness. Health Expectations: An International Journal of Public Participation in Health Care and Health Policy, 19(1), 112–120. http://ezproxy.uakron.edu:2048/l ogin?url=http://search.ebscohost. com/login.aspx?direct=true&db= mnh&AN=25581724&site=ehost- live	The goal of our study was to present a preliminary description of the preferences of adolescents with psychiatric illness regarding communication with their mental health providers and contextualize these preferences within existing thought on how to approach this new and significant challenge.	n=20 Participants were from ages 14-18 with diagnosed mental illness such as anxiety, depression, mood disorders, PTSD, and ADHD.	Qualitative Study Level 6	Participants in this study were in favour of communicating with providers over social media, highlighting a number of potential advantages. Specifically, participants emphasized the properties of continuous access and prompt response, less potential for embarrassment than in face-to-face communication and on-going monitoring.	It is important to recognize that with the potential for constant access, patients may expect a 'rapid response' that may be beyond the capacity of clinicians to facilitate. When communicating online, providers need to be aware that although patients may appear to be opening up more easily, significant non-verbal information may be lost. Finally, although monitoring appears to be a way to facilitate rapid intervention during times of crisis, the risk of misinterpretation may limit the ability of mental health providers to make accurate assessments of posted content.	As a relatively small study, these results should be considered preliminary in nature, and further work is required to confirm our findings. Secondly, our analysis was complicated by the sheer number of social media platforms used by our patients, and further work could be helpful in delineating whether participants have different preferences for different services.