The hazards and benefits of social
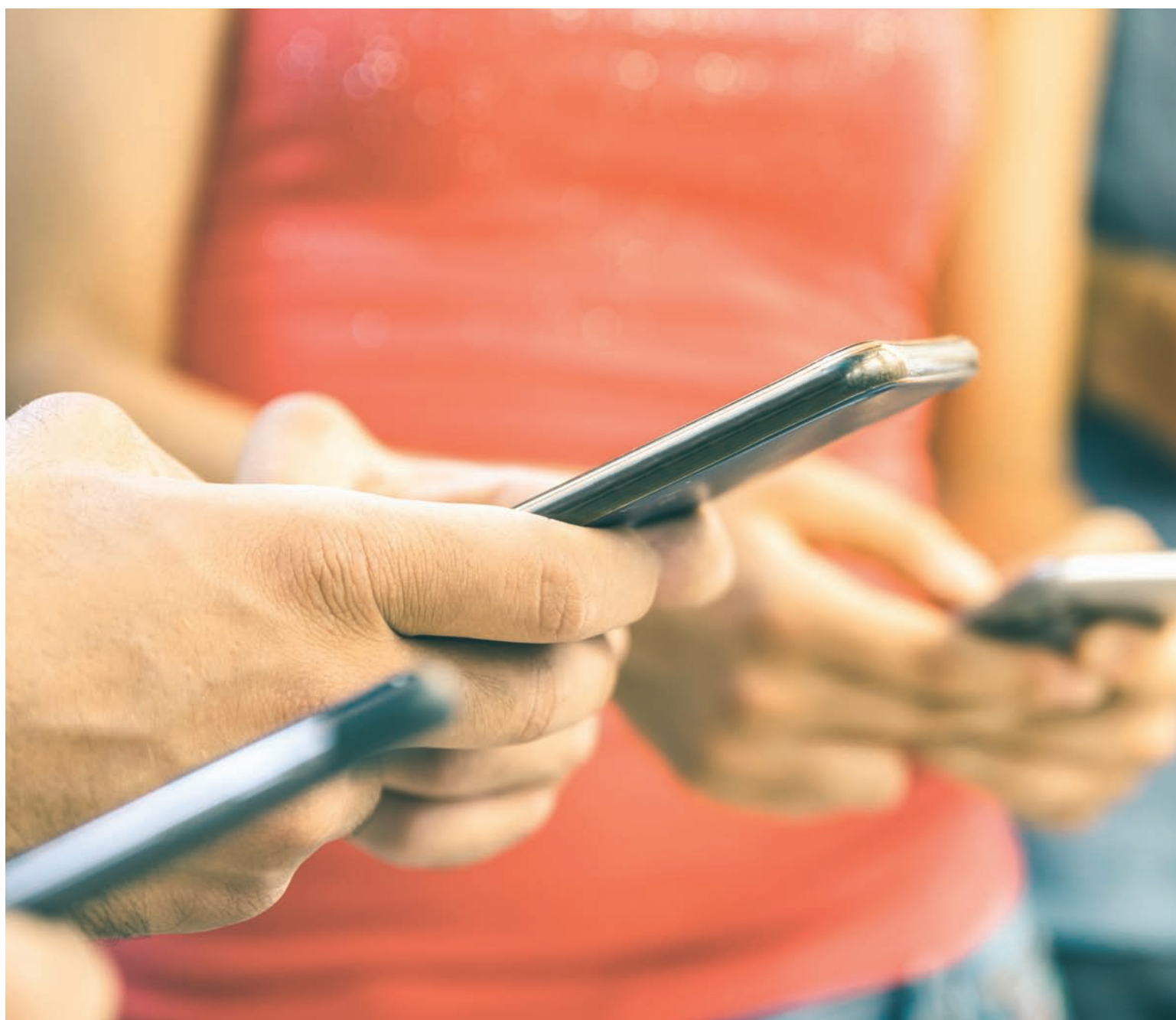
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media use in adolescents

Abstract: Studies have found that social media can act as a catalyst to negative attitudes and behaviors in adolescents. This article reviews the current evidence and explores if there is a connection between social media and mental health issues.

SOCIAL MEDIA has changed the way we communicate, how we relate to one another, and how we develop relationships. However, exactly how social media and the internet impact adolescent development is not well understood. Before the social media age, the National Longitudinal Study of Adolescent to Adult Health study, which included over 90,000 high school students, showed that physical and indirect social connections significantly affect other behaviors such as smoking, sleep, substance use, school success, criminal behavior, and sexual activities.[1] A more recent study of 467 adolescents linked increased anxiety and depression to individuals who were "emotionally invested" in social media.[2] Because the connection between brain development and social connectedness is vital to an adolescent's overall mental health, researchers are now examining the latest influencing factors such as smartphones, the internet, digital gaming, and social media platforms.[1,3]

Negative consequences of social media use may include difficulty focusing, stress, depression, and anxiety.[3] Studies have found that social media can act as a catalyst

for negative attitudes and behaviors.[1] The question is, does social media cause mental health issues such as depression, loneliness, and anxiety, or are adolescents who suffer from these maladies more likely to use social media? The evidence is inconclusive. This article explores current literature on these multifaceted phenomena and examines the implications for nurses. The literature search was limited to original research (no reviews) published from 2010 to 2018.

Negative effects

Social media's effects on the mental well-being of adolescents depend on many factors, including how it is used. Two recent studies found a direct correlation between time spent on social media and decreased mental well-being.[4,5] For adolescents diagnosed with depression, Radovic and colleagues found they used social media to gain attention from others by posting inappropriate material, comparing themselves with others, and seeking approval from peers.[6]

Teppers and colleagues investigated the possibility of loneliness as a motive for adolescents to become involved in social media platforms such as Facebook.[4] The results indicated that adolescents who feel lonely in peer relationships are more likely to use Facebook to feel more connected to others and to compensate for a lack of social skills. Interestingly, when the study participants did this, they experienced an increase in peer loneliness. These authors propose this is because the adolescents who spend more time interacting online are spending less time building deeper offline relationships.[4]

FOMO and other influences

Adolescent use of social media can be tied to the fear of missing out (FOMO). Riordan and colleagues
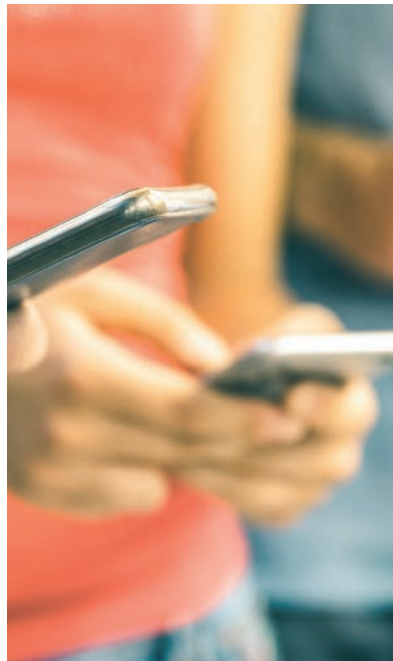
Social media's effects on mental well-being depend on how it is used.

describe FOMO as "...the sense that others are having a rewarding experience which one is absent from."[7]

Some studies used surveys or questionnaires focused on the adolescents' own perceptions of social media use, mental health, and social connectedness. One study included the parental perspective to determine a connection between the number of an adolescent's social media accounts and frequency of use with feelings of loneliness and FOMO.[5] They found that social media activity contributed to loneliness, FOMO, and parental reports of mental health issues such as hyperactivity/impulsivity, anxiety, and depression.[5]

Barry and colleagues also looked at how adolescents compare themselves to others through social media and how social media use contributes to FOMO.[5] They found that those who perceive that their experiences are lacking are more likely to internal-

ize symptoms by keeping feelings to themselves instead of expressing them.[5] The researchers also found that adolescents with fewer social media accounts who scored higher in the FOMO category suffered less from internalizing symptoms.[5]

Baker and colleagues looked at the impact of FOMO on depression and its influence on social media use.[8] More depressive and physical symptoms and lack of attention were associated with an increase in FOMO.[8] They concluded that FOMO and adolescent social media use can be measured to predict depressive and mental disorders.[8] However, because of the limits of the study, no conclusions could be drawn as to whether depression and physical symptoms caused increased social media use or if the social media use itself caused the depression and physical symptoms.[8]

In 2016, Woods and Scott investigated social media use in adolescents ages 11 to 17 and its influence on self-esteem, anxiety, and depression.[2] The study targeted nighttime use of social media and concluded that greater overall social media use and nighttime use combined with an emotional attachment were associated with decreased sleep quality, lower self-esteem, increased anxiety, and depression.[2]

Social isolation and mental health challenges

Adolescents who compare themselves to one another may have a diminished state of mental well-being or develop depressive symptoms. A link has been noted between adolescents' heavy use of Facebook and other social media with the envy of others. Tandoc and colleagues found that envy can lead to feelings of depression in a study of 736 college students.[9] The study found that using Facebook to follow what others are posting led to feelings of resentment, which contributed to depression. The term

"Facebook depression" has been used to describe depression that develops from extreme overuse of social media.[10]

Self-esteem and body image issues

How one perceives his or her body image can correlate with adolescent development and overall well-being.[11] When comparing adolescent boys and girls, adolescent girls were found to have a higher prevalence of problems with negative body image and tend to be more dissatisfied with their physical appearance on social media. Adolescent girls may obsess over finding photos that show only their best profile images. In addition, adolescent girls who are more dissatisfied with their appearance use social networking more frequently than their male counterparts.[11]

Positive effects

Positive effects of social media are also well documented. The literature indicates that adolescents who lack social skills may experience improvement in self-esteem and well-being as a result of positive feedback from social media connections.[10] For example, many people measure
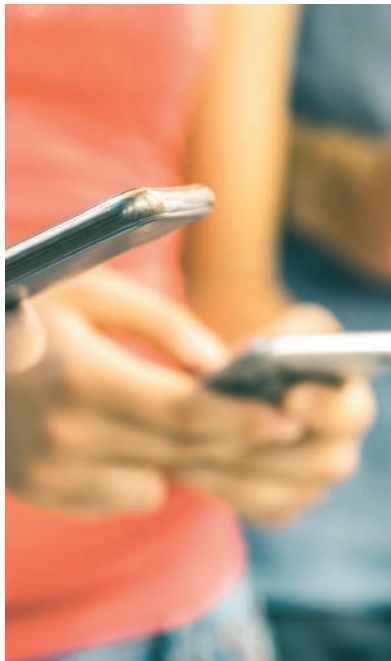
Nurses have a critical role in identifying and preventing problematic internet use.

popularity by observing their status updates. Favorable updates correlate with life satisfaction.[12] Students increasingly use social media as a public performance platform that

conforms both to their own identities and their identity as part of an online community.[12]

Vossen and Valkenburg provide an interesting insight in a longitudinal study of 942 adolescents.[13] The findings showed that prolonged exposure to social media may have a positive impact on adolescent cognitive and affective empathy. The researchers found that the use of social media increases empathy over time and concluded that the adolescents' use of social media increased their aptitude to appreciate feelings of others and express their own feelings. Although the negative effects of social media tend to get more attention, it is important to consider the positive effects and uses to encourage a healthy relationship between adolescents and social media.

Implications for nurses

Due to the pervasiveness of digital connectivity, assessments of safe social media use must be a standard component of nursing care.[14] Nurses are in a vital position to screen and assess for problematic internet use, as well as to intervene and educate parents and adolescents about internet safety. From providing educational resources to guidance on setting boundaries, nurses can play an important role in helping parents and children understand the ambiguous nature of social media.[10] (See *Social media resources for patients and care providers*.) One resource to which nurses can direct parents is the American Academy of Pediatrics Family Media Plan, an online tool that allows parents to set time limits on social media accounts.[10]

Nurses should also screen for problematic internet use in children and adolescents. Screening tools and questions are available for nurses to use at patient wellness visits to determine adolescents with problematic

Social media resources for patients and care providers

Resource	Link
American Academy of Pediatrics Family Media Plan	www.healthychildren.org/English/media/Pages/default.aspx
Seattle Children's Hospital: Problematic Internet use among teens, and how to measure it	https://pulse.seattlechildrens.org/problematic-internet-use-among-teens-and-how-to-measure-it/
Problematic and Risky Internet Use Screening Scale (PRIUSS)	http://mediad.publicbroadcasting.net/p/kplu/files/201502/PRIUSS_scale_and_guidelines.pdf
Development and testing of a 3-item screening tool for problematic internet use	www.ncbi.nlm.nih.gov/pmc/articles/PMC5636184
Diagnostic questionnaire for internet addiction	https://onlinelibrary.wiley.com/doi/full/10.1002/j.2051-5545.2010.tb00278.x

internet use (PIU).[10] One such tool is the Problematic and Risky Internet Use Screening Scale, a validated screening tool that scientifically identifies adolescents at risk for PIU.[10]
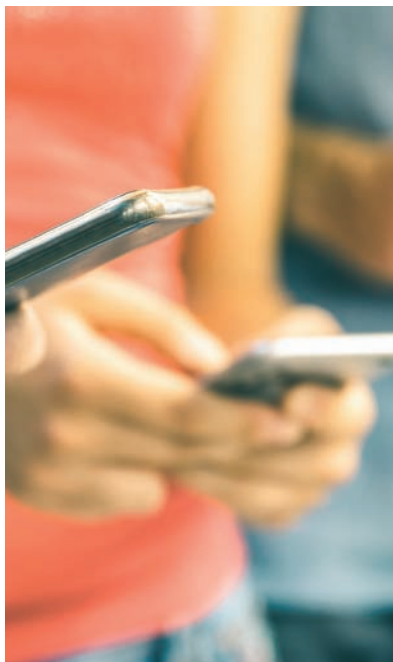
Risling, Risling, and Holtslander created a tool called the Social Media Assessment Package.[14] This tool allows nurses to assess the use and effects of social media as well as design a plan for positive change. It includes the whole family in the process. This assessment can provide nurses with a picture of social media use within the family and resources to help guide the family in a balanced, safe, and well-informed direction.

When adolescents exhibit negative effects secondary to social media use, supportive resources such as counseling should be made available. Because of the prevalence of social media and the ways in which adolescents can be negatively impacted by its use, nurses have the ability and the resources to address these concerns as a public health issue.

Recommendations

While social media influences are not always detrimental to adolescent well-being, the specific type of media may determine whether this exposure results in positive or negative consequences. Social media can provide interventions and resources, such as support groups, to help with depressive symptoms. Technology may also contribute to the well-being of adolescents by improving social connectedness, self-esteem, and mood. Technologic interventions may support and encourage other healthy behaviors, such as exercise and medication adherence.

Healthcare professionals need to be educated about the positive and negative effects of social media use on adolescents. Healthcare providers should establish protocols to prevent inappropriate or excessive social media use that preys upon the mental health of adolescents. Assessment of safe social media use should be a priority during an adolescent's wellness visit. Education on using social media safely for youth care workers, parents, adolescents, and nurses is a critical part of creating and sustaining a safe digital culture.

With the ever-increasing popularity of social networking, it is imperative to further explore this phenomenon and the effect it may have on the mental health of adolescents, and to develop strategies to counteract any negative effects. Future research may need to focus on the connectedness of adolescents, how they relate to others in establishing authentic relationships, and how their perception of connectedness plays a part in their overall well-being. Exploring the correlation between social media use and brain development will help to establish biological causes for some of the mental health challenges faced by the youth population. ∎

Healthcare professionals need to be educated about the positive and negative effects of social media use on adolescents.

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