

The Digital Self: How Social Media Serves as a Setting that Shapes Youth's Emotional Experiences

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Abstract Social media is a term for numerous technologies that allow instantaneous communication, status updates, and social networking among individuals. Social media platforms today include text messaging via cellular phones and social networking sites such as Facebook. The use of social media by youth (preadolescents and adolescents) continues to increase across the world on a yearly basis. Youth in nearly every country use social media to maintain nearly constant contact with their friends. Given the importance of both social media and friendships to youth, this review examines the impact of social media on the emotional experiences of youth. Social media can have a positive impact upon loneliness, intimacy, and relationship maintenance during adolescence. However, adolescents also experience relational issues via social media and are more reckless online. Social media, particularly Facebook, may have both a positive and a negative impact on mood symptoms and other mental disorders. Social media may play a role in identity formation by allowing younger users to experiment with different behaviours and interactional styles. The effects of social media may lead to more positive outcomes for boys than for girls. There is need for research on

social media use during preadolescence, since work is largely conducted with adolescents, and for further research to be conducted with potential mediators between social media and well-being (e.g., friendship).

Keywords Social media · Friends · Well-being · Preadolescents · Adolescents

Introduction

The existing literature on peer relationships indicates that friendships with age mates are crucial for the psychosocial development and general well-being of youth (Rubin et al. 2015). It is also evident that technology and online communication is currently ubiquitous for youth, particularly as a tool for socialization (Lenhart et al. 2010). As Barth (2015) observes, adolescents who have grown up in a world of constant online communication cannot imagine the childhoods of most clinicians, who grew up without it, and paradigms of development, socialization, sexualization, and education have fundamentally changed. This constant communication is primarily maintained via the Internet (social networking sites, such as *Facebook*, status update sites such as *Twitter*, and media sharing sites such as *Instagram*) and via modern cellular phones (in the form of text messaging and instantaneous picture sharing). The many different forms that this communication can take are often considered under the umbrella term of “social media” (Von Muhlen and Ohno-Machado 2012). In the current article, we endeavor to illustrate the importance of friendship and social media in the lives of youth, particularly preadolescents (the period of development between the ages of 10 and 12) and adolescents (between the ages of 13 and 17), and the impact that these factors have on their

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emotional well-being. Our goal is to show that social media may serve as a setting that plays a role in shaping emotional development in certain young people.

The Importance of Relationships for Youth

Relationships during youth have long been recognized as complex multidimensional constructs with diverse qualities (e.g., Bukowski and Hoza 1989). Peer relationships take many forms and occur at different levels of social complexity, specifically the group and the dyad. Friendships are a primary form of dyadic peer experience. This type of peer relationship refers to reciprocal bonds between youth, which differ from relationships with other peers with whom they may interact on a daily basis but not necessarily forms close connections with (e.g., at school). It is well known that friendships are of extraordinary importance to the psychosocial development of youth, especially for the overall well-being of both preadolescents (i.e., school-age children) and adolescents. Although the relationships of younger, preschool aged children tend to be characterized by play, preadolescents spend more time with their friends, increase in the amount of time spent in conversation, and base their interactions on liking and disliking of others (e.g., Bukowski et al. 2011a). During adolescence, friendships with age mates become more salient and increasingly complex and are typically characterized by greater similarity to their friends and the importance of social status (Brown and Larson 2009). Brown and Larson (2009) report that positive adjustment during adolescence is influenced by the possession of broad social skills and the social acceptance one acquires (e.g., status and power). These findings highlight the importance of social circles and the opportunities for learning and positive friendship provisions that are experienced at different periods of development.

Friendship quality has the ability to protect preadolescent and adolescent youth alike from a host of negative outcomes. For instance, positive friendship quality can moderate internalizing issues such as depressed affect for preadolescent as well as adolescent youth (Bukowski et al. 2010). Friendships have been shown to offer protection to at-risk school-age youth in both the short-term (e.g., via the presence of a friend during a stressful event; Adams et al. 2011) and the long-term (e.g., protect against anxiety disorders for victims of sexual abuse; Adams and Bukowski 2007). Conversely, friendships can have a negative impact on preadolescent youth who experience relational (e.g., gossip or spreading rumours) and/or physical (e.g., hitting or punching) forms of victimization (e.g., Velásquez et al. 2010). Gender differences have also been widely cited within the literature. For instance, compared with boys, girls appear to possess a greater number of friendships

(e.g., Rose et al. 2011) that are characterized by a high level of affective connection (see Rose and Rudolph 2006 for a review). The quality and character of a young individual's friendships, then, play a role in development and well-being beyond the simple presence or absence of friendships.

Beyond the importance of being engaged in a relationship characterized by mutual liking, it is crucial for youth to have specific types of friendships characterized by particular friendship qualities (see Brown and Larson 2009), namely, intimacy (see Bukowski et al. 2011b) and security (Weimer et al. 2004). Both of these friendship provisions play a critical role in the lives of young people. Intimacy involves friendship closeness and disclosure of personal feelings and thoughts, whereas security refers to the safety or the durability one feels in regard to their relationships. During preadolescence and adolescence, intimacy becomes more complex as greater emotional support may be needed than in childhood (e.g., Buhrmester 1990). Similarly, as initially stated by Sullivan (1953), relationship “durability” (i.e., security or reliable alliance) is especially important within friendships during this turbulent stage in life. Essentially, it is undeniable that particular friendship provisions are central to the development of youth as their peers take on greater importance in their lives.

In recent years, youth have been increasingly connected to others via social media, particularly social networking sites. Although social media may provide a means of staying in touch with friends, it is also presumably difficult to balance the information provided to one's friends and with their peers in general. Given the importance of social media as well as relationships to youth, it is important to examine the impact that social media has on young people during their development.

Social Media Use by Youth

Usage and Statistics

There are several ways in which individuals stay connected with one another, including social media. Research with college students indicates that the greatest reason for social media use is social need (Wang et al. 2012). Although the majority of the literature on social media centers on adults, adolescents and preadolescents are presently frequent users of social media. A national survey sampling 5436 Canadian students in grades 4 through 11 was conducted in 2013 to chart the use of technology among early adolescents (Steeves 2014). The authors found that, more than ever, youth are attached to their portable electronic devices. For instance, 39 % of students reported sleeping with their cellular phones. Such findings imply that youth are connected to their electronic devices and, in turn, their social

relationships virtually 24 h a day. The survey reported that the primary means of accessing the Internet was with cellular phones, with little gender differences between boys and girls (see also Gross 2004). The survey found that 24 % of young people in grade four own cellular phones and that this number increases to 85 % by grade 11. The data indicate the near universality of electronic device use among youth.

Aside from cellular phones, people can remain socially connected via social networking sites (SNSs). *Facebook* is a highly popular website for youth used by 57 % of young North Americans, second only to *YouTube* (75 %) (Steeves 2014). *Facebook* is a social networking platform for those over the age of 13 (Aydin 2012) and hosts over a billion accounts worldwide (Kross et al. 2013). *Facebook* is distinct from other social media in that it provides a forum where youth can see information posted by other people and gain access to information about the social networks of others, such as who their friends are connected to. Whereas e-mail, chatting, and instant messaging happen in real-time (i.e., are synchronous), *Facebook* allows for information to remain visible to a host of users even if one is not currently online (i.e., SNSs are asynchronous). Adolescents also have a large number of contacts (i.e., friends) on *Facebook*, 176 people on average, which puts them in contact with more people than they would normally see in-person (Reich et al. 2012). Evidently, SNSs such as *Facebook* are popular and distinct forms of social media that provide access to a highly personalized and greater and more diverse volume of material than is available through other technology.

Facebook use increases steadily throughout childhood. The national survey conducted by Steeves (2014) found that social media use increases substantially (i.e., 54 %) from grade 4 to grade 11, which suggests that adolescents place greater importance on social connection than do children. When it comes to *Facebook*, 67 % of those in grade 7 and 95 % of those in grade 11 have an account. Additionally, a third of students in grades 4 through 6, who are below *Facebook*'s required age of 13 years, are users of the site. Valkenburg and Peter (2011) reported that online communication is so popular amongst adolescents that this age group far outnumbers adults in terms of instant messaging and SNS use. Similarly, time spent on *Facebook* is greater for adolescents than for adults (Christofides et al. 2011). Thus, adolescents are the most active users of SNSs like *Facebook* although their use is less likely to be supervised by adults compared to children's use (Steeves 2014), and the literature on the risks and consequences of activities such as "sexting" (Ahern and Mechling 2013) and cyber-bullying (Gini and Espelage 2014) is unfortunately plentiful.

When accessing social media, one of the most common online activities (reported by 52 % of youth) is using SNSs

to post one's own or to read someone else's messages. It has been well documented that adolescents commonly use the Internet for social purposes (Reich et al. 2012). Similarly, it has been found that 53 % of the time youth are online they are using SNSs and the daily time spent on SNSs is an average of 28 min (Jelenchick et al. 2013). Others have estimated that the average amount of time adolescents spend online is 2 h per day (Tiggemann and Slater 2013), which is the same as college-aged youth (Thompson and Loughheed 2012). Hence, accessing social media consumes a large amount of time in the life of a young person.

Social media has been implicated as one reason for the evolution of the very concept of friendship. Johnson and Becker (2011) summarize how friendship, once conceptualized by researchers as a "fragile" relationship, might now better be conceptualized as a "flexible" relationship. They argue that computer-mediated communication (CMC) has contributed to friendships being more "elastic" and prone to changes over time. They rightly note that constant contact with friends is not the same as quality contact, however.

The Positive Impact of Social Media on Youth

There are several known positive consequences for young people who engage regularly with social media. Benefits include the enhancement of social contact, independence, and communication (Ito et al. 2008) as well as a sense of emotional connection with others (Reich 2010). Valkenburg and Peter (2007c) reported that preadolescents and adolescents interact online mainly to remain connected with their existing friends (88 %) (see also Creasy 2013; Pempek et al. 2009). Additionally, preadolescents and adolescents who communicate with friends on the Internet feel closer to their existing friends (Valkenburg and Peter 2007c). In fact, Yang and Brown (2013) found that self-reported levels of loneliness are lower and that social adjustment is higher for late adolescents who use *Facebook* in order to maintain relationships while transitioning to college. Similarly, some report that college students' loneliness decreases with increased *Facebook* use (Lou et al. 2012). Jordán-Conde et al. (2014) found that late adolescents frequently use *Facebook* to communicate intimate topics with their friends, although adolescent populations do not appear to use *Facebook* to form romantic relationships (Moreau et al. 2012). Moreover, Valkenburg and Peter (2009a) formulated "the Internet enhanced self-disclosure hypothesis," which argues that increased social connectedness and well-being, which are often experienced by adolescents via using the Internet, results from heightened self-disclosure. These authors found support for their claim in a longitudinal study which

demonstrated that instant messaging increases friendship quality for adolescents due to intimate online self-disclosure (Valkenburg and Peter 2009b). Ito et al. (2008) found that youth tend to use social media to gather information and to connect with others who share their interests. It appears that communicating online allows people to enhance existing relationships as well as foster new ones with similar people that they may not encounter day to day.

Moreover, adolescents are motivated to use online communication for companionship (Gross et al. 2002) and to maintain their relationships (Jordán-Conde et al. 2014). Dolev-Cohen and Barak (2013) also suggest that instant messaging, which involves sending electronic messages back and forth in an online conversation, can contribute to the well-being of adolescents who are distressed by providing an outlet for their emotions. In their study, instant messaging was found to result in improvements to one's emotional state such that adolescents experience emotional relief following such conversations with their peers. Similarly, Valkenburg and Peter (2011) report that friendship formation and quality are enhanced by online communication. Despite these strong ties to Internet communication, Kearney (2013) reported that adolescents do not perceive their interactions on *Facebook* as providing the same level of friendship quality as the relations they experience face-to-face, indicating that in-person communication is not threatened by SNS use. Clearly, using the Internet for communication purposes has numerous benefits for the emotional well-being of youth.

Aside from the social benefits, the potential educational benefits of social media should not be forgotten. Public health organizations have published data on successful use of social media as a way of reaching their target populations (e.g., Kornfield et al. 2015). Particularly for younger children, there is evidence that “safe and secure online communication” can teach understanding of and positive attitudes towards other cultures and foster learning about the world and multiculturalism (Hou et al. 2015).

The Negative Impact of Social Media on Youth

Despite the documented positive aspects of social media use, data regarding their negative effects is accumulating. Fox and Moreland (2015) suggest that research to date may have underestimated the negative effects of social media use because researchers are asking the wrong questions and missing out on more ephemeral, hard-to-quantify findings. Nonetheless, several recent findings suggest that there may be negative effects of social media on youth. Steeves (2014) found that creative uses of social media (e.g., homemade videos, sharing artwork) are uncommon on a daily or weekly basis (4–9 %) and that social media is typically used for communication with friends and entertainment consumption

(e.g., online games at 59 %). Additionally, many adolescents report negative relational experiences via social media. For example, adolescents experience online meanness and bullying (“cyber-bullying”) (52 %), misunderstandings (7 %), unwanted contact (23 %), and unintentional disclosure (17 %) while using social networking websites (Christofides et al. 2012). Although youth predominantly communicate with their existing friends online, adolescents are more likely than adults to add “friends” to *Facebook* who they do not know or like (Christofides et al. 2011). This finding indicates that youth are more careless about who they interact with online than older individuals. Taken together, it is evident that there are risks present for young people who use social media.

Much of the research on the negative consequences of social media use has focused on depressed affect. For example, it has been reported that troubled adolescents (i.e., those experiencing victimization and depression) form closer online relationships than other adolescents, which suggests that online relationships may attract more socially and emotionally vulnerable adolescents (Wolak et al. 2003). It has also been shown that, for college students, approximately one third express mild depressive symptom references on *Facebook* (Moreno et al. 2011) and that *Facebook* use has a negative impact on their cognitive and emotional well-being (Kross et al. 2013). While Jelenchick et al. (2013) reported that there is no association between depression and *Facebook* use, Cooper (2006) reported that ineffectiveness, a self-reported measure of depressive symptomatology, is related to Internet use in childhood, but these results were correlational and as such do not suggest patterns of causality. Morgan and Cotten (2003) reported that the impact of Internet use on depression differs depending on the activity that one engages in. For example, college students who use the Internet for communication via instant messaging and chat rooms experience a decrease in depressive symptoms, whereas depressive symptoms increase when the Internet is used for other purposes (e.g., shopping). However, their target populations were much older. On the other hand, van den Eijnden et al. (2008) found that feelings of depression were positively related to instant messaging but not to e-mail or chat use for adolescents. These authors argue that psychological well-being in youth is compromised by frequent Internet use since these interactions displace those everyday face-to-face interactions with friends and family. It should be noted that not all of these findings are specific to *Facebook* use, pointing to a lack of depth, breadth, and consensus within the literature. In fact, studies which correlated increased Internet use with greater depressive symptomatology have failed to show a similar correlation between SNS use and depression, which further supports that not all Internet use is equal (Banjanin et al. 2015).

There is also a phenomenon called “Facebook depression”. “Facebook depression” describes a situation where individuals become depressed due to *Facebook* use (Jelenchick et al. 2013) or, due to being rewarded with attention from close others when they post depressive status updates, wherein individuals’ online personas may appear to be depressed even when the individual is not (Moreno et al. 2011). Mixed findings have been reported on this subject; currently, the literature does not suggest that *Facebook* use per se predisposes individuals to become depressed but it may be that some individuals are more at risk when faced with this particular stress.

Young people can also be at an increased risk for a host of issues while using the Internet, likely due in part to their limited self-regulation and susceptibility to pressure from peers (O’Keeffe and Clarke-Pearson 2011). *Facebook* use has been related to jealousy in college students, which is potentially due to the availability of ambiguous personal information about one’s romantic partner (Muise et al. 2009), and also hinders recovery following a breakup (Marshall 2012).

Some researchers argue that adolescents are cautious when using SNSs and thus their safety is not at high risk (Reich et al. 2012), whereas others report that adolescent caution regarding the disclosure of personal information on *Facebook* varies depending upon individual and social differences (Liu et al. 2013). Late adolescents have reported that their personal information is safe on *Facebook* and are not concerned that their disclosure on *Facebook* could threaten them in the future (Jordán-Conde et al. 2014), which may suggest that youth may not pause to consider the long-term implications of using SNSs like *Facebook*. Moreau et al. (2012) found that those aged 11–15 years are more likely to request the withdrawal of unfavourable photos of themselves on *Facebook* while 16–21 year olds will simply remove their identifying information. The authors interpret this finding to mean that younger preadolescents, who have not yet developed a secure sense of identity, cannot tolerate seeing unflattering pictures of themselves made public, whereas adolescents, who have a more secure sense of identity, can tolerate knowing that such pictures are public as long as they are not explicitly identified in them. Ultimately, the extent to which posting information online is detrimental for adolescents remains unclear.

SNSs provide platforms through which vulnerable youth can be exposed to agendas that might inspire or worsen psychopathology. Of particular interest to mental health workers are “pro-ana” groups, which teach patients with anorexia how to lose weight in an efficient manner, as a way to hide their disorder (Teufel et al. 2013), and non-suicidal self-injury guides, which not only encourage self-mutilation, but also provide extensive advice on how to best go about it (Seko et al. 2015). Such resources can prevent the discovery of a treatable disorder, interfere with therapy, or potentially put a youth at risk of death.

One additional negative impact of social media deserves mention, but is beyond the scope of this review. A growing body of research has examined Internet addiction (Kuss et al. 2014). Increasingly, work has specifically identified *Facebook* addiction as a potential clinical construct (Schou Andreassen and Pallesen 2014). The vast majority of research on this topic to date has been conducted in the undergraduate and adult populations and little is known regarding addiction in preadolescents and adolescents (Ryan et al. 2014). However, it is probable that some youth, likely only a small minority, possess a vulnerability to developing symptoms of a “SNS use disorder”. For the time being, the only Internet-related mental disorder identified in the Diagnostic and Statistical Manual of Mental Disorders 5th Edition is Internet Gaming Disorder, under the heading of Conditions for Further Study (American Psychiatric Association 2013), and this diagnosis specifically does not include excessive use of *Facebook*. Further research on maladaptive and excessive use in youth is necessary.

The information presented here illustrates the significance of social media in the lives of youth. Given the nature of SNSs and the amount of time that youth spend on such sites, it can be argued that social networking platforms such as *Facebook* can serve as developmental contexts for adolescents. It is expected that such settings are particularly important for preadolescents and adolescents given that these individuals are experiencing a period of rapid change physically, socially, and emotionally. In this sense, social media might be especially influential during this developmental period, since SNSs provide a forum in which youth can explore aspects of themselves, their peers, and the world.

Identity Formation and Self-Presentation

Sullivan (1953), a prominent interpersonal relationships theorist, believed that preadolescence is a crucial time for personality development of the individual and is also a time when youth begin to care for the needs of others as opposed to simply thinking of themselves. Similarly, Erikson (1959) proposed that adolescence is the developmental period where identity becomes the primary concern. It is also widely understood within the developmental literature that adolescence is a period when youth aim to foster their own autonomy via their identity creation, sexuality, and interpersonal intimacy (e.g., Valkenburg and Peter 2011).

Valkenburg and Peter (2011) argue that youth develop both self-presentation and self-disclosure skills in order to cultivate their personal autonomy, while Jordán-Conde et al. (2014) suggest that *Facebook* is a place where late adolescents experiment with their identity as their identities are not yet fixed. For example, both younger and older

adolescents experiment with their identity on the Internet by modifying their self-presentation through instant messaging and chatting (Valkenburg et al. 2005) and older adolescents tend to experiment with the expression of sexual content as well as explicit language within chat rooms with peers (Subrahmanyam et al. 2006). College students feel greater subjective well-being when they present themselves positively on *Facebook* (Kim and Roselyn Lee 2011), and present themselves as having better emotional well-being and greater positive affect on *Facebook* than they do in their actual lives in order to enhance their self-presentation (Qiu et al. 2012). In this way, youth can receive feedback from others and integrate this feedback into their self-identity (Valkenburg and Peter 2011). Valkenburg and Peter argue that online communication allows for the controllability of self-presentation and disclosure that results in a sense of security, which is not necessarily possible with face-to-face interactions. Moreover, they go on to state that the Internet provides: (1) anonymity of one's identity (e.g., in chat rooms) and audiovisual anonymity (i.e., reduced visual or auditory cues that may be overwhelming), (2) asynchronicity (e.g., one can change what they were going to write), and (3) accessibility (e.g., large opportunities to share information). All of these factors are particularly important for preadolescents and adolescents, who may be especially self-conscious at this stage in their lives.

Sex Differences

Importantly, SNS use appears to impact male and female adolescents differently (Valkenburg and Peter 2009a). Blomfield Neira and Barber (2014) discovered that male users of SNSs might experience positive effects such as the development of social skills and higher social self-concept than their male peers without SNS profiles. Conversely, female users may experience lower levels of self-esteem and higher depressed affect than their same sex peers without SNS profiles. Furthermore, it has been found that adolescent girls, compared with boys, react more strongly emotionally and behaviourally to ambiguous teasing on *Facebook* (Barnett et al. 2013). Tiggemann and Slater (2013) reported that for adolescent girls, *Facebook* usage is associated with greater concerns with regards to body image (e.g., belief in the thin ideal), although these results were correlational in nature and causality could not be determined. Adolescent males also tend to be more sexually explicit and active online than females (Subrahmanyam et al. 2006). There is also some initial exploratory research available indicating that female college students are more likely to become anxious if access to *Facebook* is unavailable and report that *Facebook* causes stress (Thompson and Lougheed 2012). It is therefore critical to

take gender differences into consideration when assessing the impact of social networking on well-being.

The Experience of Anxiety by Youth

One aspect of well-being that has been largely neglected within this literature is anxiety. Few studies have been conducted on the topic of social media usage and anxiety, with some data from older populations. Researchers have found that socially anxious university students use the Internet in order to manage their social fears (Shepherd and Edelmann 2005) and that anxious college students use *Facebook* to connect with other people online (Clayton et al. 2013). However, contradicting evidence has been found for younger individuals; socially anxious adolescents are as likely as their non-anxious peers to have a *Facebook* account and their social anxiety does not impact how they use their SNS or how much time they spend on it (Creasy 2013). At the very least, these studies identify that anxiety is an important facet of well-being to take into consideration.

Another key study conducted by van den Eijnden et al. (2008) used a longitudinal design to investigate adolescent well-being and compulsive Internet use. These authors found that online communication frequency is related to compulsive Internet use over time when using instant messaging and chatting (i.e., real time electronic communication) and is not associated with e-mail use. Compulsive Internet use involves a preoccupation with using the Internet, feeling a loss of control, and compulsive tendencies, as well as experiencing self-conflict or struggles with others as a result of Internet use. These same authors also reported that depression and instant messaging are positively related with one another, although this is not the case for loneliness. Moreover, depression and loneliness do not appear to be associated with using chat rooms or e-mail.

Despite these important findings from Selfhout et al. (2009) as well as van den Eijnden et al. (2008), surfing the Internet and instant messaging are not the same as usage of SNSs, and as such these results cannot be extended to *Facebook* use. However, these results emphasize the importance of taking individual differences into consideration since social media impacts each person differently. In this sense, mediators and/or moderators exist in the relationship between social media and well-being.

Potential Mediating Variables in the Relationship Between Social Media and Well-Being

Friendship Relations

One potential mediating variable that may exist between social media use and well-being is friendship relations. It

has already been emphasized that friendships with peers are of particular importance for preadolescents and adolescents but few studies have examined online friendship.

Valkenburg and Peter conducted a series of mediational analyses to explore this relationship. In their first study (2007a), they reported that the relationship between well-being and Internet communication during adolescence is mediated by friendship closeness and that a positive relation between the variables exists. When they ran the model without any mediating factors, a negative relation between the variables was found. In other words, existing adolescent friendships that are close in nature (e.g., disclosure is present) account for the positive effect of Internet communication on well-being. Not only do these results suggest the need to account for additional variables, but they also indicate that friendships have an important influence on adolescent well-being via Internet communication. In their second study (2007b), they found that quality of friendship quality mediates the relation between well-being and time spent instant messaging, and that time spent with friends is a mediator between quality of friendships and time spent instant messaging. These results suggest that well-being is associated with Internet communication for adolescents. In the third study (2007c), they reported that when compared with their non-anxious peers, socially anxious preadolescents and adolescents more strongly believe that intimate topics are more effectively communicated online than in person. In turn, this leads socially anxious adolescents to use online communication, which in turn increases their closeness to their friends.

Despite these critical contributions to the field, these studies used cross-sectional data, and as such directionality cannot be inferred. Moreover, as with much of the literature presented in the current article, these findings do not pertain to SNSs such as *Facebook* specifically. Therefore, it is evident that further research is needed with more complex, sophisticated designs and subsequently more advanced statistical analyses.

Friendship relations and social reciprocity may further mediate whether use of SNS improves or exacerbates emotional distress. Frison and Eggermont (2015) demonstrated that when adolescents sought social support during stressful life events, depressed mood improved if they perceived themselves receiving support and worsened if they did not. This finding underlies the obvious but important point that it is not the act of reaching out to close others, but rather the perception of their reaching back in response, that gives a sense of emotional support and increases an individuals' capacity to tolerate adverse events.

Selfhout et al. (2009) investigated the association between perceived friendship quality, social anxiety, depression, and Internet usage over a 1-year period

consisting of two waves of data collection. This particular study focused on surfing the Internet (i.e., browsing that does not involve online communication) and instant messaging. The results of this study suggest that the impact of Internet usage on young people is manifested differently for adolescents depending on whether they believe that they possess high or low quality friendships. Specifically, youth who report having high quality friendships are not affected either positively or negatively by their Internet usage, whereas in adolescents with low perceived friendship quality, more time spent surfing the Internet predicts increased depression and anxiety while more instant messaging was associated with lower levels of depression.

Individual Differences

Individual differences refer to potential cognitive and/or emotional tendencies that are characteristic of certain people. Individual differences are crucial to consider as mediating variables since not every boy and girl will be impacted equally or similarly by SNS use. These individual differences are potentially key underlying factors that explain the association between social networking and well-being. Literature on social media and youth often emphasizes the “poor-get-poorer” and “rich-get-richer” assumptions (e.g., van den Eijnden et al. 2008). These beliefs hold that adolescents with emotional difficulties will experience greater trouble from Internet use (i.e., “poor-get-poorer”) while healthy adolescents will benefit (i.e., “rich-get-richer”). The social compensation hypothesis is also cited frequently (e.g., Valkenburg and Peter 2007c); it posits that online communication is used predominantly by youth facing difficulties (e.g., are introverted, lonely, or socially anxious). As with “Facebook depression,” there is conflicting evidence presented on these assumptions with somewhat greater support for the “rich-get-richer” hypothesis (see Valkenburg and Peter 2009a). Despite differing theoretical orientations, it is well understood that individual differences must be taken into account as mediators. Surprisingly, mediation analyses involving individual differences are uncommon.

Cognitive Attributions One important individual difference is one's cognitive attribution pattern (i.e., the reasons individuals use to explain the events they experience or observe). It is well known that interpretations of and reactions to online information can be affected by one's personal attitudes (Barnett et al. 2013). Barnett et al. (2013) found that adolescents who experience teasing in their offline lives are more likely to anticipate having negative emotional and behavioural reactions to ambiguous teasing on *Facebook*. Specifically, those who had experienced teasing offline anticipated that they would feel worse and

react more negatively towards teasing than individuals who had not dealt with teasing. These findings provide initial evidence that cognitive expectations are important individual differences to consider when examining the relationship between social media and well-being.

Personality Characteristics It is also important to consider individual differences in personality traits, such as introversion and extraversion. Valkenburg et al. (2005) reported that extraverted younger adolescents and introverted older adolescents are more likely to present themselves as older than they actually are and as more flirtatious online, which provides evidence that interacting with others serves distinct purposes for youth with different personalities at varying time points in their development. These same authors also stated that introverted and female youth are more likely than extraverted and male youth to experiment with their online identities. They may be motivated to modify or hide their shy identities as a form of social compensation. Furthermore, Dolev-Cohen and Barak (2013) reported that introverted adolescents who are feeling distressed experience greater emotional relief following instant messaging with their peers than do extraverts. Taken together, these findings provide evidence for the differential impact the Internet in general and SNSs in particular have on youth.

Additionally, adolescent online friendship formation is affected by introversion and extraversion that in turn impacts Internet usage (e.g., frequency), motives (e.g., social compensation), and degree of online self-disclosure (Peter et al. 2005). Peter et al. (2005) found that extraverted adolescents form friendships online due to the fact that they engage in greater levels of self-disclosure and spend more time communicating on the Internet. Introverted adolescents also form friendships online, with the hopes of gaining some sort of social compensation. Further evidence suggests that older populations such as university students experience more compulsive Internet use if they are introverted as opposed to extraverted and that introversion as a trait is a predictor of low social connectedness overall (McIntyre et al. 2015). The authors interpreted their results to indicate that introverted individuals may spend more time interacting with others online than in person because of the difficulties they experience within relationships. Thus, friendships seem to be formed and experienced differently, depending on one's specific personality characteristics.

Further support comes from literature on adults. Amichai-Hamburger and Ben-Artzi (2003) reported that personality traits influence Internet usage. Specifically, these authors found that neurotic women are lonelier and thus tend to use the Internet more frequently. They argue that the Internet does not cause loneliness per se, but that

Internet use is affected by the personality characteristics of the users. Kraut et al. (2002) also found that extraverted young adults benefit from using the Internet in that they experience increases in self-esteem, decreases in loneliness, increased community involvement, and reduced negative affect, whereas introverted individuals experience opposite effects.

Emotional Experiences Individual differences in emotional experiences are also crucial to consider. Gross et al. (2002) found that adolescents who are socially anxious or lonely at school are more likely to use instant messaging to communicate with individuals who they do not know well, which is in line with recent findings (e.g., Valkenburg and Peter 2007a). Conversely, peers who are not experiencing such difficulties tend to connect with their existing friends on the Internet (Gross et al. 2002). However, van den Eijnden et al. (2008) did not find support for these results, and instead reported that adolescents who experience of greater degree of loneliness tend to use instant messaging less than other adolescents. From the adult literature, Caplan (2003) found that online social interactions are preferred by individuals suffering from psychosocial distress compared to healthy people due to the threat reduction that the Internet provides. Results indicated that levels of depression and loneliness could predict having a preference for online social interaction.

The content that is shared online by youth is found to differ between shy and non-shy adolescents. Specifically, adolescents who are shy appear to communicate negative experiences and feelings via technology more frequently than their non-shy peers, whereas disclosure of negative content does not differ in face-to-face encounters (Laghi et al. 2013). Laghi et al. (2013) also reported that shy adolescents who express more negative experiences and negative affect online also have greater feelings of loneliness. These authors suggest that shy adolescents risk damaging their offline peer relationships by sharing such negative content with the online world.

Conclusion

The current research review has highlighted several important findings within the social media literature, as well as important limitations. The limitations underscored here serve as important points of departure for future research. Notably, one of the major limitations within the literature on youth and social media is that older adolescents are overwhelmingly sampled, and a dearth of information is available on social media use among children and preadolescents despite evidence that they frequently use SNSs such as *Facebook*. Future research would also benefit

from the consideration of more complex studies and subsequent data analyses that include mediation and/or moderation effects rather than focusing on cross-sectional samples.

Despite these limitations, several studies provide crucial information on current trends amongst youth. In summary, friendships with peers are of high importance to youth and are one of the most essential parts of their lives during the transition from childhood to adulthood. The use of social media, particularly social networking platforms such as *Facebook*, is frequent among youth and has steadily increased over the years. Social media use becomes much more prevalent from preadolescence to adolescence and adolescent usage even exceeds that of adults. Adolescence is the developmental period where social media is most likely to be used and teenagers are less likely to be supervised while using online resources, putting them at greater risk for maladjustment than other age groups. SNSs are primarily used as a means for young people to connect with their friends for social purposes and provide them with a wide range of information that is available to them virtually all of the time. Young people experience both positive (e.g., opportunities for social contact) and negative (e.g., cyber-bullying) effects when using social media. The current literature on social media suggests that youth experiment with their identities and self-presentation with others online and that boys may benefit from social media use (e.g., by building social skills) compared to girls, who are more likely to experience negative ramifications (e.g., lower self-esteem). Given the centrality of social media in the lives of young persons as well as the risks and benefits associated with social media use, it is crucial to continue to investigate the ways in which SNSs can function as a setting for development in youth.

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Compliance with Ethical Standards

Conflict of interest The authors report no conflicts of interest in regard to this article.

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