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### To Empathize or iEmpathize: Social Networking and Adolescent Female Friendships

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To Empathize or iEmpathize: Social Networking and Adolescent Female Friendships

by

Jennifer A. Schonberg

B.A., The George Washington University, 2014

M.S., Antioch University New England, 2018

DISSERTATION

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Department of Clinical Psychology  
**DISSERTATION COMMITTEE PAGE**

The undersigned have examined the dissertation entitled:

**TO EMPATHIZE OR IEMPATIZE: SOCIAL NETWORKING  
AND ADOLESCENT FEMALE FRIENDSHIPS**

presented on April 24, 2020

by

**Jennifer A. Schonberg**

Candidate for the degree of Doctor of Psychology  
and hereby certify that it is accepted\*.

Dissertation Committee Chairperson:  
Martha B. Straus, PhD

Dissertation Committee members:  
Kate Evarts Rice, PsyD  
David Arbeitman, PhD

Accepted by the

Department of Clinical Psychology Chairperson

**Vincent Pignatiello, PsyD**  
**4/24/2020**

\*Signatures are on file with the Registrar's Office at Antioch University New England.

## Dedication

This dissertation is dedicated to my parents, Jonathan and Jill Carey.

Their love knows no bounds.

## Acknowledgements

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## Abstract

Through qualitative methodology, this dissertation aimed to explore adolescent girls' use of social networking sites (SNS) and the impact these sites could be having on girls' development of empathy and their ability to address conflict in their friendships. The topic is introduced by outlining the relevant statistics and through highlighting some of the negative and positive influences of SNS use on adolescent female life. Carol Gilligan's theory of moral development is explained and used to frame the research questions for this phenomenological research study. Section One of this dissertation reviews the current literature on this topic, including how social media use is impacting the sexual, emotional, and psychological health of adolescent girls. In addition, this chapter outlines how certain developmental processes in adolescence such as acquiring empathy and socializing intersect with SNS in this digital age. The concepts of rupture and repair are explained as they relate to female aggression during the teenage years. The importance of empathy development and the potential impacts of SNS on brain functioning are discussed. Section Two of this dissertation outlines the qualitative methodology: Interpretive Phenomenological Analysis (IPA). Section Two includes a description of the study participants, interview process, procedures, data analysis and outlines the potential ethical concerns associated with this project. Section Three reports on the findings of the study, including a description of the demographic data and a presentation of clusters and themes. Section Four presents the results in detail and reports on the implications for clinical practice, limitations of this study, future directions for research, and researcher reflections.

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*Keywords:* social networking sites, social media, digital native, adolescence, development, empathy, rupture, repair, female friendships

### **To Empathize or iEmpathize: Social Networking and Adolescent Female Friendships**

In this study, I used phenomenological methodology to explore the ways in which adolescent girls use SNS to navigate their relationships. More specifically, I was interested in inquiring about how social media as a whole could be impacting the ways in which adolescent girls address conflict in their friendships. I was hoping to learn about the impact of SNS on the development of empathy and girls' ability to address both rupture and repair in their friendships. My goal was to illuminate girls' voices, gaining insight into their opinions and perspectives on both the advantages and challenges of SNS use in navigating ruptures and sustaining connections with peers.

Adolescence is a crucial developmental period. It is a time for self-discovery, increased social independence and continued identity development. Peers, parents, educators, and other influential parties can directly impact the development of adolescent girls during face-to-face interactions. Recently, Internet based entities are also playing an increasingly larger role in influencing the younger generations during this critical life stage (Cookingham & Ryan, 2015). Also known as "digital natives" (Prensky, 2001) who were born and raised using computers and smartphones, today's teens use these forums to share content, post their opinions, and express themselves more than any other demographic group (Lenhart, Purcell, et al., 2010). Although computers were initially developed for adults, in the past two decades adolescents have adopted these technologies for their own social purposes and typically become the family expert on how to use social networking platforms on the computer and smart phone (Spies Shapiro & Margolin, 2014). According to a national survey, 87% of adolescents ages 12 to 17 years reported using Internet sites, and this figure increases over the course of high school to 94% in 11th and 12th grades (Lenhart et al., 2005). Researchers have found that the average teenager spends nine out

of their fifteen waking hours on their smartphones, computers, or tablets (Willett, 2016). Certain applications are being used less by digital natives, such as Facebook. Aboulhosn (2020) reported on this statistic via the webpage SproutSocial (<https://sproutsocial.com/insights/facebook-stats-for-marketers/>) and discussed how in 2015, 71% of teens were active on Facebook, however only 51% of American teenagers between 13 and 17 years old use Facebook today. One of the more recent studies led by Monica Anderson and conducted by the Pew Research Center in 2018 revealed that 89% of the teenagers surveyed admitted that they are online “almost constantly” or “several times a day” (Ohlheiser, 2018, para. 4). In the same survey, just 11% of those teens said they go online once a day or less. Anderson (2018) said that this rise in online activity is most likely linked to the increase in the number of teens who own a smartphone or have access to one (Ohlheiser, 2018). The Pew Research Center further found that almost all adolescents (95%) now have smartphones; this is a marked increase from just three years ago when Pew reported that 73% of teens had smartphones (Ohlheiser, 2018). It seems that smartphone ownership is universal across races and socioeconomic means, in comparison to computer or tablet possession (Ohlheiser, 2018).

The Pew Research Center also assessed whether teens feel that social media and SNS have a positive or negative impact on their lives. Results show that 31% of the teenagers involved in the study reported feeling that SNS have a mostly positive impact, 45% reported that the impact is neither positive nor negative, and 24% said that SNS have a mostly negative effect on people their age (Ohlheiser, 2018). Teens who spoke about the beneficial aspects of social media use discussed how these sites can make certain kids feel “less lonely or alone,” and how SNS allow teenagers to express their opinions, emotions, and connect with other people who feel the same way (Ohlheiser, 2018). One young man said he enjoys using SNS because “a lot of

things created or made can spread joy” (Ohlheiser, 2018). In terms of the dominant responses from teens who feel that the effects are mostly negative, these individuals worry most about bullying online and SNS hurting relationships (Ohlheiser, 2018).

At the end of 2006, 55% of online adolescents had a profile on an SNS, compared to 20% of adult Internet users (Madden et al., 2007). Based on more recent data, approximately 73% of adolescents in the United States use SNS (Lenhart, 2009, 2012; Lenhart, Ling, et al., 2010). Social media and networking site use is especially popular among young women (Kimbrough et al., 2013; Muscanell & Guadagno, 2012). The 2018 Pew Research Center Study on social media use among teens revealed that 50% of teen girls say they go online “almost constantly” compared to 39% of teen boys (Ohlheiser, 2018). Young women use social media to socialize, to be entertained, and to share their lives with other people. Adolescent girls begin and end their days checking or posting to SNS. The presence of SNS in adolescent girls’ lives is indisputable; however, concerned adults are only beginning to understand the impact of these sites on adolescent development and social interactions (Spies Shapiro & Margolin, 2014).

While SNS offer possibilities for expression and social connection, the effect that SNS are having on girls is a subject of academic and public concern (Gabriel, 2014). For example, although young women use SNS for a variety of reasons, there are numerous sites that promulgate thin ideals of female beauty, typically targeted at adolescent girls (Tiggermann & Slater, 2013). Adolescent girls are a demographic for which body dissatisfaction is also particularly problematic (Bearman et al., 2006; Ricciardelli & McCabe, 2001). Sociocultural models of body image and disordered eating propose that body dissatisfaction can develop when women repeatedly compare their appearance to others (Keery et al., 2004; van den Berg et al., 2002; Vartanian & Dey, 2013). Given the large quantity of photographs that are uploaded onto

SNS daily, these outlets provide girls with a barrage of appearance-related social comparisons that have a documented impact on body image (Fardouly et al., 2015).

In addition, websites now exist that promote harmful and detrimental practices and lifestyle choices. For example, adolescent girls can access websites on their computers and smartphones that promote the virtues of anorexia nervosa (Norris et al., 2006). These sites are referred to as “pro-anorexia” or “pro-ana” sites that contain controversial and dangerous content that promote anorexia as an admirable lifestyle choice. Common themes that can be found on “pro-ana” sites include religious metaphors, lifestyle descriptions, and “thinspiration.” Religious metaphors include the Ana Psalm and Creed, with messages centered on control, starvation, and self-hate. Adolescent girls can post pictures of their bodies on “pro-ana” sites that can provide encouragement and serve as motivation for extreme weight loss (Norris et al., 2006).

In addition to the potentially damaging sites promoting body comparisons and self-harming behaviors, SNS allow young women to express themselves sexually, with the full range of impact from playful to devastating. For example, sexting, or sending explicit sexual messages or photos, is an integral part of teenage social exchanges used by this generation to flirt, forge romantic partnerships, joke around, and have fun (Albury & Crawford, 2012; Albury et al., 2013; Ringrose et al., 2012). However, teens who have the chance to send and receive explicit photographs or messages on SNS may not fully understand the consequences or repercussions of their actions.

Over a variety of studies, researchers investigating cultural sexualization express concern that these trends of sexting and sexualized content on SNS compress adolescence and accelerate sexual development (Gabriel, 2014). In addition to the concern of accelerated development, the sexualized content found on SNS is troubling because teenage girls are still developing

cognitively, socially, and emotionally. Therefore, they may lack the sufficient maturity to fully understand and consent to the sexual material they both produce and are exposed to on SNS (Gabriel, 2014).

Another set of challenges posed by SNS include the numerous metrics available to assess popularity, including, for example, the public display of how many friends a person has on a SNS or “likes” one collects on a post. This increases the potential for great insecurity as teens now compete both on SNS and in their face-to-face lives for friends and social approval. Posts and pictures that are more daring with sexualized content garner more approval and popular responses from the audience, particularly male peers who could be encouraging female friends or romantic interests to post a certain type of titillating picture or comment (Gabriel, 2014). Given that exploring sexuality and sex throughout adolescence is a normative aspect of development, adolescent girls may aspire to post sexually charged content on SNS to attain a certain social status amongst peers (Furman & Shaffer, 2003). Some teenage girls may be motivated to post material online that is seemingly innocuous at first but could be quite damaging to their self-esteem and promote risky offline sexual behavior as well (Gabriel, 2014).

Despite the abundance of research that focuses on the potentially negative aspects of using SNS, these sites offer documented positive benefits as well. For example, Spies Shapiro and Margolin (2014) discussed how SNS allow adolescent girls to explore aspects of their personal and social identities. Given that forming friendships and relationships with peers is a crucial developmental task throughout adolescence, SNS foster this interpersonal growth by providing teenage girls with the ability to connect with peers, sustain and deepen existing friendships, and explore various topics through online communication.

Indeed, SNS are based on the premise of relationship creation and maintenance, either with existing friends or with people who have similar interests to the user (Boyd & Ellison, 2008). These social networks provide consumers with a virtual platform where people may gather to communicate, share, and discuss ideas (Raacke & Bonds-Raacke, 2008). The profiles that adolescent girls create become the focal point in their social networking existence. Each profile is unique to the creator; SNS allow adolescents to create and develop a preferred image that expose to others how they would like to be seen.

In some ways, SNS can be deeply personal and dynamic. For example, on SNS, teens upload personal photos, post comments, and “like” one another’s information. Users can regulate, curate, and update the content that is posted on their personal social media pages; therefore, teens also have the chance to think about their individual and social identities with considerable intentionality (Spies Shapiro & Margolin, 2014). In this sense, a user can aspire to her ideal-self, and try out a variety of “selves” through her SNS profile, perhaps making it a platform uniquely suited to the tasks of adolescent identity development.

Profiles on SNS also serve as a communication medium among users. The concept of “friend” on SNS is generous and inclusive; users are encouraged to identify with untold others as potential friends. On many sites such as Facebook and Instagram, a person can display how many friends she is connected to or how many followers she has, and it is easy to increase these numbers (Dunne et al., 2010). Boyd and Ellison (2008) referred to this as a “public display of connection” (p. 213) and believe that a SNS profile can be used to showcase who the user is and the company she keeps.

Adolescents, too, have positive impressions about SNS. For example, in their qualitative study about the uses and gratifications of SNS use, Dunne et al. (2010) found that adolescent



girls use SNS to communicate with others, to gain and maintain peer acceptance, to escape boredom, to create an identity and maintain it, for entertainment, to interact with boys, and to search for information.

From a clinical standpoint, accessing and understanding the current research regarding adolescent girls and the various negative and positive influences from SNS should be a priority for clinicians who work with this population. Notably, too, much that has been written about SNS is the product of adult inquiry and analysis—usually the work of digital immigrants. Given the ubiquity and permanence of SNS, it is a significant omission that researchers have only begun to hear what adolescents have to say. What is the deeper, multidimensional impact of SNS on their emotional and social lives?

Taking the time to listen and understand how teenage girls conceptualize their social networks and the disadvantages and advantages of using SNS could change the way practitioners address and interact with this population. This dissertation fills a gap in the research literature by finding out how adolescent girls think and feel about social media; they have never known a world without SNS and surely it has shaped how they see themselves and how they navigate their relational worlds.

Clinical psychologists who work with this population have an ethical responsibility and a clinical opportunity to understand better how teenage girls' developing identity, friendships, and sense of connection and belonging are being changed and transformed in this digital age. A broader understanding might further depathologize teenage social networking practices and create a richer context for supporting these digital natives who have learned to grow and adapt in a world so immersed in social networking and media culture.

## **Glossary of Terms**

### **Social Networking Sites**

Social networking sites (SNS) are a fairly new phenomenon and increasingly popular among adolescents. These are sites or applications on smart phones and computers that allow users to create and curate online profiles that may or may not represent the user's true identity and permit social interaction (Cookingham & Ryan, 2015). Young people have been in the forefront of social media use in general and SNS in particular (Pew Research, 2007). Facebook is the most popular social networking platform, with over 1.3 billion regular users (Facebook, 2014). Other SNS include Twitter, LinkedIn, YouTube, Pinterest, Instagram, Snapchat, Tumblr, and Reddit. These sites are popular amongst young people because they allow for individualized self-promotion as well as inclusion into a virtual social group that might not be possible in physical reality (Cookingham & Ryan, 2015). Throughout this dissertation, the terms social networking sites and social media as a whole will be used interchangeably.

### **Digital Natives**

Prensky (2001) popularized the terms "digital native" and "digital immigrant." Prensky (2001) explained that these terms are metaphors and not distinctions or brands; rather these terms are fluid. Digital natives are people who grew up in one culture, such as the children and teenagers of modern-day society who have grown up using electronic devices as part of daily living. This group does not remember a time before immersion in the digital world. In comparison, Prensky (2001) described digital immigrants as people who grew up in one digital culture and moved into another. Digital natives understand technology, and while they are adept at using social media, they still may not know how to code or how certain apps work (Mashable, 2016).

### **Theoretical Frame: Carol Gilligan's Theory of Moral Development**

Carol Gilligan proposed that developmental theory in psychology has been primarily based on research and samples using male participants and perspectives. This omission of women and other groups generated a new set of questions for theorists of human development. One question was to ask whether current developmental theories can be applied to understanding or assessing the lives of people who differ from those upon whose lives the theories were originally based. This translates into a question of assessing the accuracy of those theories for those previously excluded from the research, including women (Gilligan, 1982).

In her studies, Gilligan used female participants to test hypotheses and generate conclusions. Gilligan and colleagues discussed how their studies of female psychological development began with listening to female voices and hearing the differences between the voices of men and women (Gilligan, 1977, 1982, as cited in Brown & Gilligan, 1992). In distinction from her findings, Gilligan noted that privileged men often spoke as if they were not living in relation to other people; they described their lives as if they were autonomous from human connection, self-governing, and free to speak and move about as they pleased.

In contrast, Gilligan (1982) noted that women tended to speak of themselves as living in constant connection with other people. Even so, these women spoke of a relational crisis: a giving up of voice, an abandonment of self, for the sake of being a good woman and preserving relationships. Gilligan and her colleagues were left with a profound sense of unease following these early studies. They decided to follow female psychological development back through girls' adolescence and childhood. It was through these discoveries that they came to witness a relational crisis in female adolescent psychology, one that was comparable to but distinct from the crises that boys experience (Brown & Gilligan, 1992).

Through their research, Gilligan and colleagues found that a woman's psychological development within patriarchal societies and male-voiced cultures is inherently traumatic. Girls feel a pressure to take themselves out of a relationship with themselves and with women as they reach adolescence because, living in a patriarchal society, they begin to feel more pressure to get married and start a family. For a girl to disconnect herself from women means she must dissociate herself not only from her mother but also from herself. She must remove herself from being a girl to being a woman, which means, literally, "with men" (Brown & Gilligan, 1992, p. 216).

Maintaining relationships is paramount and can occur at the cost of a voice. For girls in adolescence to speak their minds and say what they are feeling often means to risk losing their relationships and finding themselves powerless and alone (Brown & Gilligan, 1992). This is a particularly salient concern in SNS culture; girls have the challenge of having to advocate for themselves in person while also using SNS and online formats to communicate and voice opinions. These online formats could be affecting the ways that this group connects and bonds; forming and maintaining relationships online likely requires a different set of skills than being a friend in person. This seismic cultural shift raises the interesting question of whether SNS are influencing adolescent girls' friendships and their ability to communicate and advocate within these relationships.

Gilligan's theory of moral development marked a particularly important contribution to developmental psychology research and underpins the research questions for this dissertation. There has been evidence of sex differences in the findings of psychological research that comes mainly from studies that reveal the ways in which men and women construct the relation between self and others. Since moral judgment pertains primarily to conflicts in the relation of

the self to others, differences in the constructions of those relationships leads to varying definitions of morality (Gilligan, 1982).

Gilligan's theory of moral development consists of three stages: preconventional, conventional, and postconventional (Kalsoom et al., 2012). Within the preconventional stage, the goal is for individual survival. Girls and women in this stage recognize that at times, there may be a conflict between doing what is responsible and doing what is good for the self. After this stage, there is a transition from selfishness to responsibility to and for others. In the conventional stage, girls and women attempt to behave responsibly while avoiding inflicting harm on others when possible. Women realize that accomplishing this may involve self-sacrifices. After this phase, women begin to transition from goodness to truth; the truth is that the woman is a person too. The last stage is defined by a principle of nonviolence. Women strive to not hurt others and avoid harming the self. Women begin to consider this as the rationale for all moral behaviors and use this principle when making moral judgements (Kalsoom et al., 2012).

Gilligan believed that adolescence is a crucial time in female development because it is characterized by forming connections, while also differentiating the self from others (Kalsoom et al., 2012). Adolescent girls desire to form relationships with other people because of the pleasure and satisfaction they gain from these connections. When adolescent girls feel supported in their close relationships, they are also more willing to argue or disagree (Kalsoom et al., 2012). This suggests that girls may begin to advocate for themselves more as they mature and develop stronger interpersonal bonds.

Gilligan's theory (1982) is a useful way to conceptualize how SNS could be impacting how adolescent girls navigate their social worlds. Given that forming friendships and connecting with peers in general, while also cultivating a separate sense of self is crucial during this stage, it

will be interesting to discover how social media platforms could be impacting these processes in both positive and negative ways. For example, do SNS have an impact on the development of empathy and morality in adolescent girls? In a similar vein, do the visual and impersonal elements of online life increase the urge for individual self-promotion and survival versus group responsibility, perhaps even impeding moral development as described by Gilligan? Teenage girls feel pressured to look and act a certain way online to fit certain societal standards for inclusion and popularity. Researchers exploring the effects of SNS use on adolescent female life have also found significant impacts on teenage girls' body image concerns and general sexual, emotional, and psychological wellbeing. Therefore, certain processes within psychological and moral development could be thwarted or at stake. Even in the face of many demonstrated relational advantages for online engagement, involvement in SNS could also be associated with less focus on empathizing with the "other," forming deeper and more meaningful connections, and dedication to addressing and repairing conflict within those friendships.

### **Impact of SNS on Adolescent Female Life**

#### **Body Image and Psychological Concerns**

The influence of SNS on adolescent girls' body image and resulting psychological distress is a topic of concern among research professionals. Several correlational studies have investigated the association between one SNS (Facebook) and young women's body dissatisfaction (e.g., Fardouly et al., 2015). Results indicated that female high school students who were Facebook users reported more body image concerns than did non-users (Meier & Gray, 2014; Tiggemann & Slater, 2013). Furthermore, more time spent on Facebook was associated with greater body image concerns among pre-teenage girls (Tiggemann & Slater 2014), female high school students (Tiggemann & Slater, 2013; Tiggemann & Miller, 2010), and female

university students (Fardouly & Vartanian, 2015). In addition, one longitudinal study of female university students indicated that maladaptive Facebook usage—featuring negative social evaluations and comparisons—was associated with increased body image dissatisfaction four weeks later; further, body dissatisfaction was found to mediate the relationship between maladaptive Facebook usage and increases in overeating (A.R. Smith et al., 2013). In other words, SNS allowed young women to make social comparisons between their own appearance and the appearance of their peers (Hew, 2011). Similar to the toxic effect of exposure to dangerously thin-ideal models in magazines and pictures of celebrities in the media, exposure to peers who closely match the thin ideal has been found to increase body dissatisfaction (Krones et al., 2005).

Notably, too, young women may even experience more body dissatisfaction with peer comparisons on SNS. They might feel that the appearance of peers is more personally attainable than the look of tall supermodels or wealthy celebrities due to similar lifestyles and resources that within-group peers often share (Carey et al., 2013; Leahey & Crowther, 2008; Ridolfi et al., 2011; Schutz et al., 2002). If this ideal body type is attainable by peers but not achieved by the viewer, it could result in increased body image concerns and body dissatisfaction.

This additional impact of high use of SNS on negative body image in adolescent girls is particularly concerning as it has been associated with depression, stress, and low self-esteem (Johnson & Wardle, 2005). In addition, several studies have also indicated a relationship between levels of body image disturbance and eating dysfunction. Making comparisons to others' bodies on SNS can be a maintenance factor for disordered eating (Stice, 2002). Similarly, Fabian and Thompson (1989) found that subjective body dissatisfaction was highly correlated with eating disturbance in female adolescents. In another related study, Leon et al. (1993) also

found that body dissatisfaction was one of the strongest predictors of risk factors associated with eating disturbance.

Longitudinal research offers further evidence for the relationship between body image and levels of eating disturbance. For example, Attie and Brooks-Gunn (1989) conducted a two-year longitudinal study of adolescent girls looking at this relationship (as cited in Thompson et al., 1995). The researchers evaluated levels of body dissatisfaction during the first portion of data collection and found that this construct was a significant predictor of disturbed eating two years later. Several other variables such as general psychopathology, family relationships and physical maturation were not significant predictors of eating disturbance (as cited in Thompson et al., 1995). In this digital age, teenage girls have the chance to constantly compare their appearance (their bodies) to others' bodies and physical attributes online. These comparisons could encourage girls to become obsessed with idealistic portrayals of the female form and could lead to various physical and mental health issues.

### **Smartphones and Depression**

SNS more generally may be less to blame for the increase in psychological distress among teens related to constructs such as body image and eating disturbance. Indeed, Twenge (2017) found that symptoms related to depression and anxiety in adolescent problems all traced back to a major change in teen life: the ascendance of the smartphone. Notably, for example, in a large national survey, Twenge found that in the years between 2010 and 2015, the number of teens who reported feeling less joyous and more useless (symptoms of depression) surged to 33% in the United States. The same survey revealed that teen suicide attempts increased within this time frame by 23%. Results suggest that increases in depression and suicidality among teens appeared in various backgrounds, with varying socioeconomic means, and across races and



ethnicities. Twenge (2017) found that this generation of teens, whom they refer to as “iGen,” or people born after 1995, is much more likely to experience mental health issues compared to their millennial predecessors. In particular they note that, teenage suffering correlated significantly with smartphone use—the more time spent on it, the higher the level of distress (Twenge, 2017).

### **Sexual Health and Associated Psychopathology**

The influence that SNS have on adolescent girls’ sexual health, self-esteem, and general psychological wellbeing is becoming a societal and ethical dilemma. Posts that are charged sexually often receive more validation and popular responses. Therefore, it is perhaps not surprising that sexting and sharing of nude photos might be more compelling on SNS than other forms of being intimate (Sales, 2016). Sexting, or sending explicit sexual messages through texting, is a practice that is often associated with teenagers (Leshnoff, 2016). However, the reality is that adults, both single and married, routinely use text messaging to send sexual or provocative messages and pictures as well (Leshnoff, 2016). In the #metoo era, society is increasingly hearing about the emotional costs to women and girls alike when unsolicited or stolen images are shared on SNS. In addition, women and girls may be targeted because of their sharing and posting on social media, even if they do not believe that the post or picture they are sharing portrays sexualized content of any kind. Society may be judging or interpreting these posts as sexual, even if they were not intended to be received in this way.

Relationship experts propose that most adults are not sexting in the highly public ways that teenagers may be doing, but as part of a consensual relationship, adults use sexting as a fun and easy way to spice up their sex life (Leshnoff, 2016). For both teens and adults, this issue of consent appears to be paramount; there may be distinct social perils to teens for transmitting

sexual images, but it is not just “kids these days” who are engaging in—and getting in trouble for—using SNS in deleterious ways.

Old contradictory narratives that encourage girls to be both sexually alluring and responsible gatekeepers of desire have become even more challenging to manage with the advent of SNS. In a national survey, it was found that 20% of adolescents between the ages of 13 and 19 years had sent to a peer or posted a nude or semi-nude photo or video of themselves (Sex and Tech, 2008). In a related study, Moreno et al. (2009) demonstrated that it is common for adolescents to self-report sexual behavior on personal SNS profiles; there were references to sex on 24% of the profiles reviewed in one study. Therefore, the SNS arena could provide a forum for the exchange of sexualized content. Girls feel encouraged to participate in posting and sharing sexualized photos and posts because they can feel included and validated by both peers and boys whose attention they desire. The sharing of this type of content has immediate benefits in attention and excitement. However, in time, these postings may prove to be detrimental to the self-esteem and general sexual and psychological health of the girls who post, perhaps leading to marginalization and risky sexual behaviors offline (Sales, 2016). These risky sexual behaviors could include unprotected sex or nonconsensual sex. One common cost: young girls become objectified and experience lower body satisfaction and self-esteem.

These trends are particularly concerning to digital immigrants who are significantly more distressed by the permanence of digital records than most teens are. Within academic circles, too, this indelible exposure appears to highlight the adolescent girls’ struggle at managing the fine line between the enduring—and intractable— binary of being either Madonna (virginal and unpopular) or whore (sexually liberated and unpopular). As in the past, girls who cross the imaginary line in efforts to express themselves and gain popularity face horrible condemnation.

However, now the costs seem even higher: adolescent girls who post provocative photos and comments online often suffer slut-shaming and are more likely to be targeted in cyberbullying attacks that focus on their sexuality (Sales, 2016).

Slut-shaming is the experience of being labeled a sexually out of control girl or woman, while also being punished socially for having this identity (Tanenbaum, 2015). Perhaps needless to say, the slut-shaming and bullying that young women face on SNS can have a significant negative impact on their self-worth and self-esteem. Like traditional bullying, cyberbullying in the form of slut-shaming can lead to depression, anxiety, severe isolation and poor self-esteem for the bullied individual. However, there is now less opportunity to move past such an incident, given the fact that posting something to the Internet ensures its permanent home there.

On SNS, there is no turning back once a picture has been posted, even on sites such as Snapchat where the pictures disappear after a few seconds but nevertheless remain in the virtual abyss. Thus, social media offers an even more pervasive bullying arena because the content on these sites can be viewed anytime, anywhere, and by anyone (Cookingham & Ryan, 2015). A growing body of research has linked the sexualized use of SNS by young women (in conjunction with young men) to an increase in three common mental health problems: eating disorders, low self-esteem, and depression or depressed mood (Abramson & Valene, 1991; Durkin & Paxton, 2002; Harrison, 2000; Hofschire & Greenberg, 2001; Mills et al., 2002; Stice et al., 1994; Thomsen et al., 2002; Ward, 2004). At least in the heteronormative world of sexting and posting of sexualized content, the advent of SNS increases both the excitement and peril for girls seeking attention and validation through such online exposure.

Peer culture and norms around sex and sexuality appear to be changing in association with teens' engagement with SNS. Research supports the idea that SNS offer adolescents a social

world or “media super-peer” by endorsing and establishing social and behavior norms for this group (Cookingham & Ryan, 2015, p. 3). For example, if an adolescent girl believes that her peers are participating in a behavior, even a high-risk behavior both on *and* offline, she may have additional reason to perceive this behavior as normal. Many adolescents display lower self-regulation and judgement skills because these traits are not fully developed. These factors can lead to risky behaviors, especially when using SNS. SNS provide adolescents with an attractive outlet for expression and validation; however, these forms of virtual expression may translate into risky social and sexual behaviors in real life (Cookingham & Ryan, 2015).

Preliminary research suggests that these more sexualized social norms may be additionally problematic for adolescent girls. For example, using a sample of 116 girls ages 16–19, Impett et al. (2006) measured the impact of SNS on feminine ideology, sexual self-efficacy, sexual experiences, and protection behaviors. These researchers concluded that healthy sexual development is thwarted by the sexualization of young women in social media, linking increased self-objectification with diminished sexual health (e.g., decreased condom use and diminished sexual assertiveness; Impett et al., 2006). In a similar vein, Young and Jordan (2013) demonstrated through surveying techniques that adolescents who viewed sexually suggestive content on SNS both perceived that their peers were having sex without protection and/or with strangers and were more likely to report personal engagement in these same higher-risk behaviors.

Concerns about SNS’ impact on adolescent girls extend beyond this narrow focus on their sexuality and sexual behavior. In recent years, researchers have also begun to explore how SNS might be affecting their capacity to develop empathic understanding and navigate intimate peer relationships.

## **Empathy and Prosocial Behavior**

Empathy is the ability to share and understand others' thoughts and feelings (Eisenberg & Fabes, 1990; Hoffman, 2000). Empathy is typically viewed as a multidimensional construct and has been described by the literature as an affective trait (affective empathy) and as a cognitive trait (cognitive empathy; Ang & Goh, 2010). Mehrabian and Epstein (1972) described affective empathy as an individual's ability to experience and share the emotions of others. On the other hand, cognitive empathy is the ability to understand the emotions of others (Hogan, 1969). Empathy also refers to the ability to respond to others' emotions to be supportive or to console (Hoffman, 1993; Rieffe et al., 2010). McDonald and Messinger (2011) explained that an individual's ability to empathize is important for promoting positive behaviors towards others and facilitating social interactions and congenial relationships.

Regardless of how empathy is defined, research has shown that empathic responsiveness is positively related to prosocial behaviors and negatively related to bullying and aggressive behaviors (Frick et al., 2003; Miller & Eisenberg, 1988). This basic human capacity has an impact on an individual's daily social life because possessing empathy strengthens a person's interpersonal relations, facilitates group cohesion, and promotes cooperation among friends (De Waal, 2009). By contrast, low levels of empathy have been linked with multiple symptoms of psychopathology including poor social skills and aggression (Batanova & Loukas, 2014; Pouw et al., 2013; Wolfer et al., 2012).

Empathy is present in very young children; however, it develops over time as part of healthy emotional and social maturation (Rieffe & Camodeca, 2016). For adolescents to be able to empathize with another person, they need to develop both intrapersonal and interpersonal skills. From an intrapersonal standpoint, adolescent girls must understand and appreciate the

importance of emotions as they relate to daily functioning. Interpersonally, an adolescent must feel motivated and capable of understanding the person with whom she empathizes with (Hoffman, 1990). It is also plausible to assume that for an adolescent girl to be empathic, she needs to have a certain level of emotional awareness, or the ability to recognize and appreciate the importance of emotions in her own life and in the lives of others (Rieffe & Camodeca, 2016).

Developing empathy during adolescence is essential because it helps to facilitate the formation of friendships and larger social networks (De Waal, 2009). Adolescents who can better understand and appreciate the role that emotions play in daily life and those who can connect with another person's emotions have an easier time making friends and sustaining those relationships. Adolescents who report higher empathy also report higher levels of pro-social goals, are more socially competent, less aggressive, have more supportive peer relationships, are well-liked by peers, and are more willing to help others (Eisenberg et al., 2009). In conclusion, empathy is a valuable developmental skill that enables human beings to be emotionally aware and attuned to the feelings and emotional states of other people.

### **Empathy Development in Adolescence**

People can continue to develop empathy throughout the lifespan; however, the literature shows that adolescence is an important developmental period that seems particularly critical for the acquisition and development of empathic understanding (Allemand et al., 2015).

Adolescence has traditionally been viewed as a transitional period, characterized by multiple physical and physiological changes in such characteristics as height, weight, body proportions, and hormones, combined with individual, social, cultural, and contextual transitions (Blakemore & Mills, 2014; Steinberg & Morris, 2001; Zarrett & Eccles, 2006). Some of these changes have been shown to have meaningful implications for empathy development (Allemand et al., 2015).

For example, this period brings with it improvements in abstract thinking and socioemotional changes such as increased emotion regulation abilities that promote pro-social tendencies and empathic understanding (Eisenberg et al., 2006). In addition, adolescents increasingly develop internalized abstract moral and social principles that promote pro-social and responsible behaviors, and they have more opportunities to help others by means of volunteering activities (Eisenberg et al., 2006; Hoffman, 2000).

Normative changes in social relationships with peers and adults in conjunction with increases in autonomy with respect to social behaviors and values provide opportunities to show pro-social behaviors such as empathy-related responding (Zarrett & Eccles, 2006). Furthermore, parents and other adults often give adolescents more autonomy to help promote independent decision making and more mature societal roles (Steinberg, 2008a). These tasks allow adolescents to take responsibility for their actions that could, in turn, promote responsible and pro-social behavior (Allemand et al., 2015).

### **Adolescent Socialization and Empathy Development**

Adolescence is a period of enormous growth and change. This developmental stage is significant because teenagers become less reliant on their parents and more interested in forming close relationships with peers (Allemand et al., 2015). Teens begin to transition from being entirely dependent on caregivers into more reciprocal family and social relationships and must become equipped with the skills necessary to navigate the increasingly complex social world (Allemand et al., 2015). Adolescence provides opportunities for girls to develop and exercise social competencies and skills, attitudes, and social values that help their transition into becoming caring and responsible adults (Erikson, 1968; Zarrett & Eccles, 2006).

In particular, empathy development plays a crucial role in the social functioning of adolescents and functions as the “social glue” in peer relationships (Baron-Cohen & Wheelwright, 2004). According to the Perception Action Model (PAM) of empathy, social interactions help shape and solidify mental representations of emotions, which are required to recognize and share emotions of others (Preston & de Waal, 2002). For example, when a person sees a spider crawling up another person’s arm, her mirror neurons are activated, and she gets the same creepy-crawly feeling as if it were her own arm. This same mechanism applies to emotions of all kinds (Vossen & Valkenburg, 2016). In other words, the perception of witnessing an emotional reaction in someone else activates one’s own representation of that emotion and enables “state-matching” (Preston, 2007).

As children grow up and enter the teenage years, they have greater awareness of emotions; through social interactions, their affective range increases and deepens. As teenagers begin to experiment socially and increase their social competencies, they become exposed to a wide range of emotions and experience how these emotions affect and deepen relationships; in turn, a teen’s ability to empathize expands correspondingly (Vossen & Valkenburg, 2016).

Teenagers’ cognitive understanding of their physical and social worlds also change dramatically and rapidly throughout adolescence (Smetana et al., 2015). In a typical developmental trajectory, they should become better able to plan, make decisions, and think about goals for the future. These affective and cognitive changes do not come without gender specific challenges for adolescent girls around issues of identity, autonomy, intimacy, and sexuality (Smetana et al., 2015). As such, the capacity to form and sustain friendships is a central developmental task of adolescence.



The current research on adolescence suggests that these socialization processes both interpersonally and online are dynamic and reciprocal. Adolescent girls actively participate and exert agency in the development of such connections (Smetana et al., 2015). The friendships and structure of adolescent peer groups fluctuate during this time. Collins and Steinberg (2006, as cited in Smetana et al., 2015), proposed that adolescents' friendships become closer and more intimate than in younger years. As these relationships grow stronger, adolescents feel more comfortable disclosing personal details with friends and feel more supported by their peers. With greater autonomy and less monitoring by adults, adolescents also begin to congregate in crowds or cliques. These groups help to define a social hierarchy (both within and between cliques) and help to develop and define social leaders. As adolescent girls explore where they fit into the fluctuating social hierarchies, they have a chance to explore different aspects of their identities, including developing “a friend identity” within their social worlds (Smetana et al., 2015).

Throughout adolescence, the opinions of peers become as—if not more—important than those of family members (Larson et al., 1996). Depending on the strength of their connections at home, adolescent girls are increasingly exposed to many novel social situations that they must process and cope with independently, often with little adult guidance or support, including navigating more mature sexual and intimate partnerships (Allemand et al., 2015). As parental influence wanes, the social support network can become precarious; girls rely increasingly on their peers who may be struggling commensurately with their own challenges, needing support and care, too.

Given these changes, this stage in life could represent a period of enhanced sensitivity for social experiences that might motivate certain behaviors, such as empathy-related responding (Blakemore & Mills, 2014). The social situations and increase in friendships and romantic

relationships during adolescence provide young people with excellent opportunities to practice and display pro-social skills and competencies, including empathy. Increased socialization in adolescence also provides girls with chances to receive constructive feedback from peers regarding their social skills and attitudes (Allemand et al., 2015).

Developing empathy throughout adolescence positively affects future social relationships, including romantic relationships because imagining others' thoughts and feelings promotes behaviors that are adaptive in social relationships, such as sharing, caring, helping, and active listening (Caprara et al., 2012; Eisenberg & Fabes, 1990; Graziano et al., 2007). In sum, empathy development across the adolescent years is important because it is integral to building more reciprocal systems of care within families, enriching extrafamilial peer relationships, maintaining friendships, and developing a sense of belonging in communities (Allemand et al., 2015).

### **Socialization and SNS**

The scientific and psychological study of adolescence has long focused on identity development and the formation of friendships and peer relationships as important developmental tasks (Institute of Medicine, 2010). These processes of adolescence are now complexly interwoven with SNS (Spies Shapiro & Margolin, 2014). Social media sites influence adolescent identity and social development in various ways. These platforms provide youth with a medium through which to present aspects of the self to the outside world and are used as a means of communicating and forming relationships with others (Spies Shapiro & Margolin, 2014). These sites offer new opportunities as well as challenges to presenting versions of the self to the world. In one-on-one communication through social networking, such as Facebook Messenger or Direct Message on Instagram and Shapchat, adolescents can express their likes, dislikes, world views,

secrets, and other information, exploring the boundary between private and public. The feedback loop can be instantaneous; an SNS expression can be gratified—or not—in less than a second.

There are more identity choices on social media than in person. For example, adolescents can also choose what specific details about their lives and identity they wish to share with others on SNS. In this sense, adolescents can construct a preferred identity online that they want to expose to the world (Spies Shapiro & Margolin, 2014). Concerned adults wonder about the level of accuracy or deception in these constructions; some speculate that an online posture might have unintended consequences—not necessarily negative—for identity development both on and offline (Spies Shapiro & Margolin, 2014). In particular, there is a growing body of data suggesting that SNS may have a strong, if mixed, influence on how teenage girls develop certain psychological and psychosocial abilities, including being able to empathize with another person to form and sustain friendships.

### ***Positive Influences of SNS on Teen Socialization***

Some researchers propose that SNS use can be generally beneficial for the enhancement of adolescent girls' social connections. For example, McKenna and Bargh (2000) suggest that this may be due to the “stimulation” hypothesis noting that adolescents in general have an easier time self-disclosing in online versus face-to-face communication because they are digital natives. Disclosing information online can be a less threatening way to communication with others. With self-disclosure being the main component of facilitating relationship closeness, this theory also proposes that online communication can lead to closer, high quality friendships among adolescent girls. Another hypothesis, the “rich-get-richer” hypothesis (Gross et al., 2002; Kraut et al., 2002; Peter et al., 2005, as cited in Desjarlais & Willoughby, 2010) posits another advantage for SNS use. For highly sociable adolescent girls, there are added benefits from

extending communication options through SNS (Kraut et al., 2002). Using this same hypothesis, Lee (2009) believed that SNS use among adolescents can also have iterative effects, such that more online communication through electronic sources as an adjunct to ongoing contact in person relates to more cohesive relationships overall.

McKenna et al. (2002) proposed another hypothesis, the “social compensation” hypothesis. This hypothesis proposed that adolescent girls who are uncomfortable interacting with peers in face-to-face scenarios may be better able to develop social networks and meet social needs online. For shy, socially anxious, or more awkward girls, for example, it can be advantageous to eliminate certain channels of communication, including voice tone, eye contact, and facial expressions that might be particularly stressful for them in face-to-face interactions. Some research suggests, therefore that SNS may facilitate relationships both for girls who are socially adept and who feel uncomfortable in face-to-face interactions.

### ***Gender Differences***

SNS research suggests that there are gender differences in terms of the importance placed on interpersonal goals and group belonging, and in the type of SNS used (Barker, 2009). Boys tend to focus on the entertainment aspects of SNS such as watching videos or sharing humorous posts, whereas girls tend to focus on the relational aspects of SNS. Rainie (2003), as cited in Barker, 2009) found that girls were more likely than boys to talk to their friends online about secrets, romantic relationships, and deep feelings. This suggests that adolescent girls may use SNS the same way they do their intimate face-to-face connections, as a forum for social connectedness and to feel supported by their friend group (Rainie (2003, as cited in Barker, 2009).

### *Positive Influences of SNS on Identity Development*

SNS may also contribute positively to adolescent girls' identity development, for example, through opportunities for connective self-disclosure online and through selective affiliation with others. SNS provide opportunities for self-disclosure and may even functionally demand this type of sharing. Decisions about how an adolescent female chooses to portray herself, the feedback she receives on these decisions, and how she adjusts her personal profile in relation to her peers' profiles may all contribute to her identity development (Spies Shapiro & Margolin, 2014). In a similar vein, Walther et al. (2011) proposed that adolescents engage in selective self-presentations online, and that the feedback from these presentations may alter the individual's view of herself—and subsequent postings.

SNS use also positively influences adolescent girls' identity development through opportunities to expand social connections. Online communication networks provide youth with multiple ways to connect, befriend, and affiliate with likeminded peers. In certain cases, these affiliations may not be available through local peer networks, therefore making social media connections more valuable. On sites such as Facebook, adolescents can join groups that reflect aspects of their identity, for example finding others who share their passions, political views, ethnicity, or sexual orientation. Through communicating with others using these groups, adolescents can explore aspects of a shared identity, fostering a sense of group belonging (Spies Shapiro & Margolin, 2014).

Adolescents can also expand and explore their interests through online forums. SNS provide this age-group with chances to connect with people from more diverse backgrounds than they may have in their physical communities, and provide the chance to expand into new intellectual, political, and social networks that could create opportunities for transnational and

global connections (Markstrom, 2010). These connections could help to broaden as well as deepen self-identity, while simultaneously capitalizing on the essential need to belong (Spies Shapiro & Margolin, 2014).

### **Potential Impact of SNS on Empathic Understanding**

The effects of SNS use and empathy development has surprisingly received little attention in the research literature (Vossen & Valkenburg, 2016) despite some data suggesting that young people are becoming less empathic (Konrath, 2012; Twenge, 2014). For example, one recent study employing a cross-temporal meta-analysis showed a decline in empathy scores among American college students over a ten-year period (Konrath et al., 2011).

Konrath et al. (2011) argued that an important potential cause for the decline in empathy scores is the concurrent rise of the Internet, and more specifically SNS or social media, and instant messaging applications. Konrath (2012) and Konrath et al. (2011) suggested that social media might be negatively impacting empathy development in young people because, although it can facilitate making new friends and connecting with others online, this aptitude might not necessarily translate into better social skills offline. More specifically, spending more time online displaces time spent with people offline, which could make skills like in-person empathic connection “rustier” (Konrath, 2012, p. 14). In addition, the reduced nonverbal cues in online interactions could further hinder empathy development in young people because it is more difficult to tell how a friend is really feeling without seeing—and feeling—his or her facial expressions or body posture (Vossen & Valkenburg, 2016).

Konrath (2012) has suggested as well that the visual anonymity in social media may loosen an individual’s ideas about what is appropriate social behavior and could lead to deindividuation. According to Diener (1980), deindividuation is a state of decreased

self-evaluation causing antinormative and disinhibited behavior. It is very different, for example, to say something hurtful using SNS as opposed to experiencing the impact of these words on the person face-to-face. Konrath (2012) further suggested that this process of deindividuation in combination with the greater interpersonal and physical distance of SNS and social media may cause people to be able to ignore the feelings of others, thus becoming less empathic.

In a recent series of related qualitative studies, Turkle (2015) also discussed how young people's developing ability to empathize may be adversely affected by their use of smartphones and computers. More specifically, Turkle investigated how adolescents' social networking practices could be affecting their abilities to sustain friendships and deal with conflict in productive ways. She noted that it is now more common for teenagers to spend more time interacting with their friends using social media than in person. Over a series of conversations, Turkle observed that the current generation of digital natives seem more interested in simply having a friend near them as opposed to connecting with this person on a deeper, more emotional level. She suggested that in contemporary culture, online friendships have become a thing of convenience; indeed, it seems easier to spend time with friends online than it is to make the effort to physically be with them.

Over many interviews with adolescents and adults, Turkle (2015) further concludes that this trend away from personal contact may even be crossing generations; not only teenagers are getting used to sharing conversations and celebrating important life events online. People of all ages may no longer expect friends to show up, and some may even prefer it this way, perhaps keeping taxing and confusing emotional engagement under wraps. Empathy requires time, personal connection, vulnerability, and emotional discipline. As teenagers shift their in-person

interactions to screen interactions, they are not making this extra effort and perhaps, like a muscle they are not using much, have less facility exercising empathy (Turkle, 2015).

Importantly, Turkle (2015) concludes that adolescent girls may be moving away from the experience of empathy to a *sense* of empathy; they may be moving from friendship to a *sense* of friendship. In this way, adolescents find comfort and companionship using their devices and SNS to stay electronically connect with friends—from a distance. When people settle for this *sense* of friendship and grow accustomed to it, the ability to empathize and ability to step up and fix relationships when they rupture could be at stake (Turkle, 2015).

### **Neurobiology and Empathy**

From a neurobiological standpoint, researchers have also begun to investigate the impacts of smartphone use on human internal processes (Fredrickson, 2013). For example, in his study on the effects of smartphone use on one's biological capacity to connect with other people, Fredrickson (2013) discussed how a human being's brain is tied to her heart by the vagus nerve. Subtle variations in the heart reveal how strong this brain-heart connection is, and how heart-rate variability provides an index of a person's vagal tone. In short, the higher a person's vagal tone, the better; this tone can be affected by a person's social habits. When a person is more socially connected through spending time in person with others, this tone can become stronger (Fredrickson, 2013). When this connection is stronger, a person's body is better able to regulate its internal systems that keep the body healthy, such as the cardiovascular, glucose, and immune responses (Fredrickson, 2013). In addition, vagal tone has been shown to be central to processes such as facial expressivity and a person's ability to tune into another person's voice. Increasing a person's vagal tone could increase her capacity for connection, friendship, and empathy (Fredrickson, 2013).



This research offers additional support for the importance of in-person human connections. It suggests that the more attuned people are to others, the healthier they become—and vice versa. As a corollary, it offers some evidence for the way a lack of positive social contact can diminish people. If a person does not regularly exercise her ability to connect face-to-face, she could eventually find herself lacking some of the basic biological capacity to do so as well (Fredrickson, 2013).

In addition, being with real people in a shared intersubjective space contributes in well-documented ways to the capacity to feel regulated. For example, Siegel (2010) applies the emerging principles of interpersonal neurobiology to promote compassion, kindness, resilience, and well-being in people's personal lives, relationships, and communities. At the crux of this model is the concept of integration, which entails the linkage of discrete aspects of a dynamic system—whether these exist within an individual person or within a collection of individuals (Siegel, 2010). Siegel views integration as the essential mechanism of psychological and biological health. In a person's mind, integration involves the combining of disparate aspects of mental processes to each other, such as thought with feeling or bodily sensation with logic. When this idea is applied to the relationship between two individuals, integration entails each person being respected for her autonomy and differentiated self while at the same time being linked to others in empathic communication (Siegel, 2010).

The tenets of interpersonal neurobiology sync nicely with Gilligan's (1982) theory of moral development; both frames emphasize the developmental and regulatory importance of being in connection with others while maintaining a separate sense of self. The quality of connection online, however valuable, cannot offer the same regulatory functions as an in-person relationship, perhaps placing adolescent girls at a developmental disadvantage in this digital age.

Without real connective contact, girls may suffer from the isolative effects of too much physical and emotional disconnection.

Sharing a smile or a laugh, tears or frustration creates discernible synchronic energy between friends. When people interact in person their gestures and biochemistries, even their respective neuro-firings can mirror one another (Fredrickson, 2013). Human beings are wired to respond to these micro-moments that build a person's ability to empathize, and improve the person's overall health (Fredrickson, 2013). If adolescent girls cannot take enough advantage of the neurobiological and regulatory benefits attendant to in-person interactions, the developmental need for authentic, regulating connection could be at stake, leading—as correlational data suggest it is—to increases in anxiety, depression, and other signs of distress among high SNS users.

### **Coregulation**

Throughout the literature, coregulation is a property of interpersonal systems that cannot be reduced to the behaviors or experiences of the people involved (Cole et al., 2004; Diamond & Aspinwall, 2003; Feldman, 2007; Sbarra & Hazan, 2008, as cited in Butler & Randall, 2013). The emphasis is not on individual emotional regulation, but rather on how both partners' emotions influence each other in a recursive pattern of mutual regulation (Butler & Randall, 2013). Affective coregulation has long been argued to provide the basis for infants' emotional self-regulation because through the co-construction of optimal emotional states, the mother extends and scaffolds the infants' emotional self-regulatory capacity (Gianino & Tronick, 1985; Tronick, 1989; Tronick & Gianino, 1986, as cited in Butler & Randall, 2013).

These processes endure into adolescence and, indeed, across the lifespan. For example, recent research has been exploring coregulation in adulthood as indicated by statistical

dependencies between romantic partners' emotional experiences (Butler & Randall, 2013). In one study, Butner et al. (2007, as cited in Butler & Randall, 2013), used a diary methodology in which both partners in romantic relationships reported daily on their positive and negative emotional experiences. Coregulation was defined as both the covariation in partners' daily affect and coupling of the rates of change between the partners. Results suggested that partners' level of positive and negative affect covaried, above and beyond the influence of their shared daily interactions. This effect was greater on days when couples spent more time together, suggesting the partner's consistent and prolonged presence is an important part of coregulation.

### **Mindsight**

A growing body of research on interpersonal neurobiology (e.g., Siegel, 2014) similarly underscores the coregulatory importance of friendships and intimate relationships in adolescence. When teens spend more time in person with friends as opposed to “with” them virtually, they are engaging in emotional coregulation, enabling friends to feel more supported and connected, improving their ability to empathize, and perhaps even helping to prevent certain forms of psychopathology that are triggered and exacerbated by experiences of alienation and loneliness.

Unlike much research exploring peer connections, Siegel (2014) discusses the importance of sustaining meaningful relationships with parents and caregivers throughout adolescence. He suggests that these relationships are particularly important for opportunities to establish strong, collaborative connections that foster the development of mindsight.

The concept of mindsight refers to the ability to perceive one's internal world of the self and the inner world of the other; mindsight focuses on the “inner sea” that human beings all swim in—in other words—the intersubjective relational space between two people (Siegel, 2014,

p. 40). Mindsight is important because human beings create mindsight maps of me (insight), you (empathy), and we (morality). Fostering mindsight leads to increased self-awareness and emotional control, enhanced empathy and richer relationships. Mindsight leads to integration by honoring differences and promoting compassionate relationships—which, in turn, leads to healthy bodies, relationships, and minds. Siegel (2014) believes humans are meant to form connections during face-to-face interactions. These interactions are a rich source of satisfaction which can change the brain in important ways.

Taken together, this body of research raises more questions than it answers. For example: What, then, is the impact of the digital age on the development of mindsight? Are teenagers developing alternative ways of empathizing with the other or creating alternate versions of morality given their expanded use of interacting with peers—and parents—using smartphones and social media? Is it possible that teenagers' brains are developing differently as a consequence of their reliance on virtual strategies for forming and maintaining relationships? Given what we know now, is it possible to conclude much about the real impact of SNS on the development of adolescent girls? The one fact that stands out at this point in time is that, perhaps for better and for worse, SNS are here to stay.

### **Implication of Online Social Approval or “Likes” and Brain Functioning**

More recently, researchers have become interested in studying the underlying brain mechanisms that may be implicated in consistent social media use. Few studies examining the neural mechanisms underlying the impacts of social media use have been conducted (Choudhury & McKinney, 2013; Mills, 2014). These underlying neural processes are important to consider not only because adolescents in general are enthusiastic users, but because subcortical regions functionally associated with emotion processing and reward undergo significant changes and

reorganization during puberty (Brenhouse & Andersen, 2011; Sisk & Foster, 2004). Specifically, the dopaminergic system and related regions in the striatum are impacted in potential mechanisms underlying two common characteristics of adolescence: an escalation in risky behaviors and an increased desire to be with and earn the approval of peers (Steinberg, 2008b). Less has been studied regarding how characteristics unique to social media contribute to peer influence (Sherman et al., 2016). However, neuroimaging studies of offline or face-to-face interaction have shown that social rewards activate a network of brain regions including the ventromedial prefrontal cortex (VMPFC), ventral striatum, and ventral tegmental area (Meshi et al., 2015). For example, sharing of information with others, receiving positive social feedback, and thinking others understand, agree, like, or think highly of you, activate the VMPFC and ventral striatum. Therefore, researches have only begun to uncover whether or not providing others with these same social rewards (e.g., giving a “like” on Facebook), may be akin to other types of prosocial behavior, which also activate the reward system. When a person reads another’s post on social media, it may elicit reward activity, because receiving information elicits curiosity, a feeling associated with activity in the ventral striatum (Harbaugh et al., 2001; Haruno et al., 2014, as cited in Meshi et al., 2015). These regions of the brain which are implicated in offline information sharing and receipt, giving and receiving feedback, and reward processing more broadly, may likely also process the rewards endowed by social media (Meshi et al., 2015).

Sherman et al. (2016) discussed how face-to-face communication and online communication differ significantly in their affordance of quantifiable interactions. In person communication is primarily subjective and qualitative, whereas many online environments allow for feedback that is purely quantitative. For example, the “like” feature on many social media applications allows for a simple, straightforward measure of peers’ approval and endorsement of

attitude or behaviors (Sherman et al., 2016). Sherman and colleagues (2016) conducted a study using a sample of 34 typically developing adolescents, ranging in age from 13–18, which examined the brains' responses during social media use. Throughout the study, participants were shown various photos on Instagram, taken from both the participants' personal pages and from random sources. Participants saw 148 unique photos, which included 42 risky images and 66 neutral, non-risky images. The participants were instructed to "like" or not "like" the photos as they were presented and neuroimaging data was collected of each participant's brain responses throughout this process (Sherman et al., 2016). These researchers found that depending on how popular a photo was, or, in other words, depending on the amount of "likes" that a photo received, this had significant impacts on how the photo was received by participants. The participants in this study were more likely to "like" a photo, even the photos depicting more risky-type behaviors, such as smoking marijuana or drinking alcohol, if the photo had already received more endorsement from peers (Sherman et al., 2016).

In terms of neutral responses, these also differed according to the number of "likes." For all of the photos presented, participants exhibited greater brain activity for photos with more "likes." The regions of greater activity included areas implicated in social cognition and social memories, including the pre-cuneus, medial prefrontal cortex, and hippocampus (Mars et al., 2012; Zaki & Ochsner, 2009), as well as the inferior frontal gyrus, which is implicated in imitation (Pfeifer et al., 2008). When participants viewed their own photographs or neutral photographs ostensibly submitted by peers, greater activity in the visual cortex was observed in response to photos with many "likes" compared to photos with fewer "likes," even though the examiners controlled for photos' luminosity and content. These results suggest that participants may have scanned popular images with greater care. Taken together, these results also suggest

that adolescents perceive information online in a qualitatively different way when they believe that this information is valued more highly by peers and the exact nature of these changes differs depending on the content depicted in the photo (Sherman et al., 2016). Although this study did not evaluate the differences between in-person communication versus online communication, the results are important and suggest that adolescents could highly value peers' perceptions and social approval, not in the form of actual relationships but in the form of a feature or "like" button on social media applications (Sherman et al., 2016).

### **Controversy Revisited**

Although many researchers have focused on the potentially negative impacts of social media and networking site use on adolescent girls' sexual, emotional and psychological health—including empathy development—in recent years, there has been a separate burgeoning body of research on the positive influences (e.g., Vossen & Valkenburg, 2016). Specifically, several studies have found that social media use can have a positive influence on different psychosocial processes during adolescence. For example, some research has documented that social media use can have a positive impact on an adolescent's self-esteem, friendship closeness, and social competence (Apaolaza et al., 2013; Koutamanis et al., 2013; Valkenburg & Peter, 2011). Indeed, despite the rationales for why SNS use may decrease empathy levels in adolescents, direct empirical evidence for a relationship between social media use and lower empathy is largely missing and some preliminary findings suggest otherwise (Vossen & Valkenburg, 2016).

In a recent survey of the field conducted by Vossen and Valkenburg (2016) only two studies specifically investigated the relationships between SNS use and empathy (Alloway et al., 2014; Carrier et al., 2015). Both studies used a cross-sectional design among young adults.

Notably, research is still lacking in terms of looking at the relationship between SNS use and empathy in younger age groups. Carrier et al. (2015) reported no significant correlation between Internet use and empathy; however, the online activity study also included gaming and browsing the internet. Alloway et al. (2014) found a positive relationship between Facebook use and empathy. This conclusion supports the idea that adolescents tend to SNS such as Facebook to practice social skills like self-presentation and self-disclosure. It is possible that these practiced skills can then be transferrable to offline interactions (Koutamanis et al., 2013; Valkenburg & Peter, 2008; Valkenburg et al., 2011).

In a similar vein, while nonverbal cues may not be present in online interactions, in their review, Derks et al. (2008) found that there were no differences in the intensity of expressing emotions between online and in person communications. In this review, Derks et al. (2008) examined the empirical evidence about whether emotions are communicated differently in online versus offline modes of communication. The researchers reviewed two types of explorations: (a) studies that explicitly examined discrete emotions and emotion expressions; and (b) studies that examined emotions more implicitly, namely as self-disclosure or emotional styles; they concluded that emotional communication online and offline is surprisingly similar.

There is an interesting explanation for these data. Social media are often used by digital natives to promote and maintain connections with existing relationships. Therefore, for adolescents who augment existing relationships with online communication, there tends to be a large overlap between their online and offline worlds (Valkenburg & Peter, 2011). Supporting this explanation, in their longitudinal study on the relationship between SNS use and empathy in adolescence, Vossen and Valkenburg (2016) found that adolescents who used social media more frequently throughout the day improved their ability to share and understand the feelings of



others over time. These results suggest that SNS could actually be a medium through which adolescents' practice and reinforce social skills, and, in turn, this greater connectivity could lead to higher levels of empathy (Vossen & Valkenburg, 2016).

In conclusion, researchers have explored both sides of the social media debate; studies indicate that there are both negative and positive aspects of SNS use among adolescent populations. However, these data do not specifically explore these effects on younger teenage girls, nor do they suggest more conclusive results about using SNS platforms other than Facebook (e.g., Instagram and Snapchat) and the impacts that these applications could be having on empathy development in teenage girls or development in general.

### **Rupture and Repair**

Typically, the terms rupture and repair occur in the context of the therapeutic relationship between client and therapist. Safran and Muran (2006) defined a rupture in the therapeutic alliance as a tension or breakdown in the collaborative relationship between patient and therapist. Ruptures within the therapeutic alliance can vary in intensity from relatively minor tensions, of which one or both parties may be only vaguely aware, to major disrupts in collaboration, understanding, or communication (Safran & Muran, 2006). Within the therapeutic relationship, concepts that are similar to rupture are empathetic failure (Kohut, 1984), therapeutic impasse, and misunderstanding event (Rhodes et al., 1994). The presence or intensity of a rupture can be measured from patient, therapist, and observer perspectives. Measurements can focus on rupture and repair events that take place either within one session or over the course of treatment (Safran et al., 2011).

In the context of adolescent female friendships, the term rupture could be generalized to describe a disruption in the alliance between friends. The rupture or impasse could be due to

various factors, such as discrepant views, an argument, a rift involving other members of the social group, or a disruption in the typical routine that occurs between the dyad. The rupture could also result from one friend not fulfilling the expectations of the other friend. The repair of the rupture could occur if the two parties are willing to be flexible and view the problem or impasse from the other's perspective. The repair could also happen if one of the girls involved in the conflict—or both—can empathize with the others' situation or emotional reactions to the conflict, and has the attendant skills to apologize, listen, and problem solve.

Over a variety of studies, girls' expectations for friendships included loyalty, commitment, understanding, and empathic understanding (Bigelow & La Gaipa, 1980; Clark & Ayers, 1993). Adolescents—as perhaps most of humanity—are attracted to and wish to befriend those who fulfill these expectations (Bigelow & La Gaipa, 1980). Over the course of adolescence, as they progress, friendship occurs on a developmental path that moves from egocentric and concrete expectations of friends to empathic and abstract expectations (Bigelow & La Gaipa, 1980; Selman, 1981; Smollar & Youniss, 1982). Reciprocity within adolescent female friendships is also an important factor. Reciprocal friendships consist of two individuals who have mutual liking for each other. This type of relationship provides the social environment necessary for adolescent girls to develop interpersonal skills such as collaboration and empathy (Buhrmester & Furman, 1986). Clark and Ayers (1988) concluded that adolescents with reciprocated friendships expressed a higher level of commitment to these relationships compared to adolescents with no reciprocated friendships. Frankel (1990) similarly found that, for adolescent girls, the number of best reciprocal friendships was positively correlated to feelings of emotional support. These findings suggest that reciprocal friendships may be particularly beneficial for adolescent interpersonal development (Clark & Ayers, 1993). If certain

expectations or some level of reciprocity are not present within adolescent female friendships, feelings of injury may lead to ongoing dissatisfaction and ruptures within the dyad.

### **Social Conflict and Aggression**

Adolescent girls form friendships and affiliate with social networks in part to differentiate themselves from their parents or caregivers and become more independent socially (Allemand et al., 2015). The rules for belonging in a family do not necessarily translate into navigating membership in peer groups. A robust scholarly literature exists exploring female friendships, particularly focusing on how girls can become aggressive and competitive when it comes to belonging to the social hierarchy. One thread of the research provocatively depicts girls as combative and mean; this information feeds into old narratives that are both disturbing and familiar. This familiarity comes from old patriarchal stereotypes of girls and women as being deceitful, manipulative, and jealous. This line of analysis underscores an anarchic depiction of femininity, that “girls will be girls,” or indirectly mean (Brown & Chesney-Lind, 2003, p. 74).

More recent research has moved away from gender stereotypes, focusing on the complexity of female aggression and anger rather than viewing girls as simply nasty or mean. The focus has shifted to a developmental perspective on how to understand girl fighting and appreciate that girls are socialized into a world that too often positions them against one another and themselves. In this vein, Brown and Chesney-Lind (2003) argue that girl conflict must be understood within the larger cultural framework as consequences of girls’ struggle for power, voice, love, safety, and legitimacy within a patriarchal society. Girls require the guidance and support from other girls to remain emotionally and psychologically stable. In addition, it can be easier for girls to take out their anger and anxieties on other girls rather than boys, or on a culture that denigrates anything remotely associated with femininity. Girl conflict can be seen not just as

something that girls use as a protective strategy, but also as something that they have been socialized into doing over time (Brown & Chesney-Lind, 2003).

Although physical girl fights are on the upswing over the past few decades, girls still tend to engage more in indirect and social aggression rather than physical aggression. However, whether expressed physically or socially, the effects of aggression are surprisingly similar, and associated with numerous social and emotional problems (e.g., Crick et al., 1999, 2005, 2006; Prinstein et al., 2001; Underwood, 2003; Werner & Crick, 1999, as cited in Underwood et al., 2009).

Physical aggression also tends to decrease over the course of development. As children and adolescents grow, they may engage in less direct aggression and more indirect forms of aggression, a form of heterotypic continuity, because they are able to anticipate a diminished risk for punishment for indirect aggression (Bjorkqvist, 1994). Indirect social aggression may also increase in adolescence because peer relationships and friendship become more important, and therefore overtly disrupting social status and friendships may be even more potent (Underwood et al., 2009). Notably, the types of anger and aggression that are expressed in adolescence increase as girls get older and their relationships become more complex (Brown & Chesney-Lind, 2003); the cycles of popularity and isolation shift and change in unpredictable and distressing ways throughout adolescence.

Girls' friendship circles can be viewed like a web, with popular girls at the center of the web being safer and more powerful (Brown & Chesney-Lind, 2003). Alliances and loyalties shift easily and rapidly during adolescence; girls must cautiously navigate the social system so that they avoid being pushed further from the center or thrown out. Being popular does not

always equate with being nice; in fact, niceness may get one closer to the center of the popularity circle, but meanness could allow someone to stay there (Brown & Chesney-Lind, 2003).

Girls—and women in general—have a unique ability to create conflict by establishing powerful judgments about each other's bodies, actions, or ill treatment (Brown & Chesney-Lind, 2003). Anger or resentment turns into girls' insulting each other; these insults tend to focus on negative bodily attributes and sexuality. In this frame, labeling another girl as fat, ugly, or slutty does not necessarily have anything to do with appearance or sex; rather, these insults are ways for girls to seek revenge or to control another girl who is a threat, too different, or too popular (Brown & Chesney-Lind, 2003).

### **Subtypes of Aggression**

Social aggression emerges in the preschool years and continues throughout childhood and adolescence in both boys and girls (Underwood et al., 2009). Social aggression includes forms of social exclusion and friendship manipulation as ways of harming peers and pursuing individual social goals (Crick et al., 1997; Underwood, 2003; Vaillancourt et al., 2007, as cited in Underwood et al., 2009). Various terms have been used to describe adolescents harming peers through social exclusion, friendship manipulation, and malicious gossip: indirect aggression (Feshbach, 1969, as cited in Underwood et al., 2009; Lagerspetz et al., 1988), social aggression (Cairns et al., 1989, as cited in Underwood et al., 2009; Galen & Underwood, 1997), and relational aggression (Crick & Grotpeter, 1995, as cited in Underwood et al., 2009).

#### ***Indirect Aggression***

The defining feature of indirect aggression is that harm is delivered circuitously, through covert means (Bjorkqvist et al., 1992). Forms of indirect aggression include gossiping, spreading rumors, writing mean notes, and encouraging exclusion of certain members from the social

group (Coyne et al., 2006). Indirect aggression has been found to be more common among girls than boys up to the age of 18 years (Björkqvist et al., 1992; Feshbach, 1969; Kaukiainen et al., 2001; Salmivalli et al., 2000, as cited in Underwood et al., 2009). This could be due to the importance of peer groups and social status that come during adolescence (Coyne et al., 2006). This trend could also be due to gender-accepted forms of more direct and physical aggression coming from boys as opposed to girls.

Feshbach (1969), as cited in Underwood (2003), proposed that social exclusion constitutes a particularly hurtful form of indirect aggression. Lagerspetz et al. (1988) found that with indirect aggression, the aggressor may remain anonymous or unidentified at times, which thereby avoids a counterattack from the target and the disapproval of others. These researchers also found that individuals engage in indirect aggression when they attack someone in a circuitous way, through social manipulation (Kaukiainen et al., 1999, as cited in Underwood, 2003). Kaukiainen et al. (1999) suggested that indirect aggression among adolescent girls may suggest a certain kind of social skill, such as social intelligence, but it is negatively related to empathy (as cited in Underwood, 2003).

### ***Relational Aggression***

Crick et al. (1999) defined relational aggression as “behaviors that harm others through damage to relationships or feelings of acceptance, friendship, or group inclusion” (p. 77). Relational aggression does not have to be secretive. Relational aggression could appear as indirect aggression in certain forms such as gossiping, however its potency lies in distinct forms such as ignoring or ceasing communication with someone (Coyne et al., 2006).

### ***Social Aggression***

Social aggression shares many characteristics with both indirect and relational aggression. The term was defined by Galen and Underwood (1997) as a behavior that is “directed toward damaging another’s self-esteem, social status, or both, and may take such direct forms as verbal rejection, negative facial expressions or body movements, or more indirect forms such as slanderous rumors or social exclusion” (p. 589). Social aggression encompasses all the behaviors in indirect and relational aggression, while adding harmful nonverbal behaviors such as eye rolling and dirty looks (Coyne et al., 2006). Some researchers are debating whether indirect, relational, and social aggression are all distinct, or what to call these terms if they are essentially the same constructs (Archer & Coyne, 2005; Underwood et al., 2001, as cited in Coyne et al., 2006).

### ***Gender Differences***

There have been debates in the field as to whether girls are more socially aggressive compared to boys (Underwood et al., 2009). Some researchers propose that girls are as aggressive as boys, but the forms of the aggression differ (e.g., Crick et al., 1999). In various studies (e.g., Brendgen et al., 2008; David & Kistner, 2000; Henington et al., 1998; Keenan et al., 2007; Leadbeater et al., 2006; Salmivalli & Kaukiainen, 2004; Tomada & Schneider, 1997, as cited in Underwood et al., 2009), no gender differences were found.

Despite these findings, other researchers suggest that social aggression may have a greater impact on girls than on boys (Underwood, 2003). In particular, there seems to be a notable association between experiences of social aggression and attendant anxiety and depression in girls (Coyne et al., 2006). In their study on the different types of aggression and sex differences, Coyne et al. (2006) found that girls tended to perceive aggression as being more

harmful than boys did. In addition, girls were more likely than boys to rate indirect, relational, and verbal aggression as more harmful. This study supports the conclusion found in multiple other studies (e.g., Björkqvist et al., 1992b; Crick & Grotpeter, 1995; Galen & Underwood, 1997; Lagerspetz et al., 1988) that girls value social relationships more than boys do and are therefore more hurt when these relationships are jeopardized (as cited in Coyne et al., 2006). Relational aggression, in particular, has been found to occur more frequently among girls than boys (Crick & Grotpeter, 1995; Crick et al., 1997), although some studies found no sex differences (Deveaux & Daniels, 2000; Hart et al., 1998; Henington et al., 1998, as cited in Coyne et al., 2006); perhaps when relational aggression is more overt and direct, gender distinctions are less pronounced.

### **Aggression and SNS**

The literature on aggression and social networking thus far focuses primarily on cyberbullying on the Internet or through social media. Researchers note the transition in aggressive and bullying behaviors from adolescents' physical worlds to their online worlds as well (Cassidy et al., 2009; Fredstrom et al., 2011; Vandebosch & Cleemput, 2009, as cited in Xu et al., 2012; Wang et al., 2009). Bullying in both spheres can take many forms, including verbal and relational (Archer & Coyne, 2005; Little et al., 2003; Nylund et al., 2007, as cited in Xu et al., 2012).

Cyberbullying reflects a new arena where verbal and relational aggression are particularly toxic (Xu et al., 2012). One of the main reasons that an individual is bullied is perceived difference; indeed, girls tend to be cyberbullied about physical characteristics that distinguish them from their peers. Participants involved in a bullying episode (that begins either in physical form or in cyberspace) often then go post about the episode on social media. Xu et al.



(2012) refers to these posts as “bullying traces” (p. 657). These bullying traces include but far exceed incidences of cyberbullying; most of them are responses to a bullying experience with the actual incident implicitly understood but hidden from view (Xu et al., 2012). Thus, girls who are bullied on SNS may first experience such attacks in person or in cyberspace; the continuation of the assault on SNS is a new phenomenon; its long-term impact on both victim and perpetrator is little understood.

In general, the literature on cyberbullying, with specific reference to adolescent female aggression on SNS, is still relatively scarce and is characterized by a lack of conceptual clarity (Vandebosch & Van Cleemput, 2008). Not enough attention has been paid to how environmental influences—including SNS use— may be affecting how this generation of girls approaches and deals with conflict (Brown & Chesney-Lind, 2003). Cyberbullying has been primarily studied through means of online surveys and school surveys amongst children and adolescents (Vandebosch & Van Cleemput, 2008). Currently, teenagers often interpret cyberbullying as encompassing a multitude of actions that occur online, but these lack specificity (Vandebosch & Van Cleemput, 2008).

To clarify and better understand the phenomenon, Vandebosch and Van Cleemput (2008) studied 53 focus groups, which included both male and female students ranging from 10 to 18 years old. Interpreting their findings, they concluded that cyberbullying behaviors met these criteria: engaging in actions that were intended to hurt (by the perpetrator) and hurtful (by the victim); part of a repetitive pattern of negative offline or online actions; and performed in a relationship characterized by a power imbalance (based on “real-life” power criteria, such as physical strength, seniority, or social status); Vandebosch & Van Cleemput, 2008). Cyberbullying may not be the only form of online aggression; it is likely that girls are navigating

ruptures in relationships on SNS in other ways, too—for example negotiating misunderstanding, disappointment, sensitivity, and struggle over the course of ongoing friendships.

### **Knowledge Gap**

SNS are ubiquitous in adolescent female life. Teenagers use SNS to maintain relationships and there are clearly demonstrated positive uses and gratifications attendant to engagement on these sites. Despite the benefits of social media and networking, psychologists continue to be concerned about the potentially damaging impacts these sites could be having on teenage girls' sexual, psychological and social wellbeing. Recent inquiry includes speculation about whether social media use in high school girls could be hindering their attainment of essential developmental tasks, including a fuller capacity for empathic understanding and more flexible strategies for repairing friendship ruptures.

This study sought to explore the gap in the literature regarding how adolescent girls use social media to address conflict and ruptures in their friendships, focusing particularly on the ways that using SNS could be affecting how teenage girls develop the capacity to empathize. One of the purposes of this study was to gather information directly from these digital natives who have consistently been embedded in the world of social media and Internet culture and are experts on their own experiences using SNS.

### **Qualitative Research Questions**

1. How do SNS hinder and/or promote relationship development amongst teenage girls?
2. How do SNS impact how adolescent girls address conflict in their friendships?
3. How do SNS affect adolescent girls' empathic understanding and responding?
4. How do adolescent girls use SNS to navigate their social worlds?

## **Method**

### **Aim of the Study**

In this study, I used phenomenological methodology to explore the ways in which adolescent girls use SNS to navigate their relationships. More specifically, I was interested in inquiring about how social media as a whole could be impacting the ways in which adolescent girls address conflict in their friendships. I was hoping to learn about the impact of SNS on the development of empathy and girls' ability to address both rupture and repair in their friendships. My goal was to illuminate girls' voices, gaining insight into their opinions and perspectives on both the advantages and challenges of SNS use in navigating ruptures and sustaining connections with peers.

The research paradigm used for the study was based on constructivist theory. Constructivism accepts reality as a construct of the human mind. In other words, this theory assumes that reality is constructed by human perspectives and experience and is inherently subjective (Dudovskiy, 2018). Researchers operating within this paradigm maintain that knowledge is constructed by scientists and oppose the idea that there is a single, appropriate methodology that can be used to generate knowledge (Dudovskiy, 2018). This research paradigm was appropriate for this type of inquiry because the aim of the study was to gather information directly from digital natives and use this information to make sense of their reality.

### **Qualitative Research Approach**

The qualitative method chosen for this project was Interpretive Phenomenological Analysis (IPA; Larkin et al., 2006). An IPA design was suitable for this study because the aim of the research was to investigate individuals experiencing specific events. The individuals in this case were adolescent girls and the specific event they are experiencing is their use of social

media. This method of inquiry is also appropriate because this phenomenological design emphasizes the experiential claims and concerns of the research participants—in this case adolescent girls. Two of the main commitments of IPA are a phenomenological requirement to understand and “give voice” to the concerns of the research participants, and an interpretive requirement to contextualize and understand these claims and concerns from a psychological viewpoint (Larkin et al., 2006, p. 102). This “giving of voice” fits well within the scope of this research project because it directly relates to Gilligan’s discussion about the loss of voice that can occur for girls and women throughout development. At times, girls and women may be silenced, whether that is due to cultural or societal constraints or values, or because in order to preserve interpersonal relationships, these groups are quieted. One aim of the current study was to learn about SNS and the potential negative impacts of these sites on social problem solving and the development of empathic understanding. The goal was to accomplish this directly through listening to the voices of adolescent girls.

IPA is an inductive approach, meaning it does not test hypotheses but rather requires researchers to employ inductive reasoning and interpretation of the data. IPA provides researchers with a chance to interact with a research question at an idiographic level (Reid et al., 2005). The goal of IPA is to investigate the participants’ lived experiences, which are paired with a subjective and reflective process of interpretation, in which the researcher explicitly enters the research process (Reid et al., 2005). Researchers using IPA are encouraged to disown any prior assumptions they may have about the research participants and the topic under study (Reid et al., 2005). The goal of IPA research is to capture and explore the meanings that participants assign to their experiences; therefore, participants are experts on their own experiences and can provide

researchers with an understanding of their thoughts, opinions, and feelings through telling their own stories (Reid et al., 2005).

The source or subject(s) most appropriate for this type of analysis are people who have expertise in the phenomenon being explored, which in this case are adolescents engaged with SNS. Adolescents are digital natives typically engaging in SNS for many hours over the course of most days; their expertise is the result of significant exposure and commitment.

IPA research focuses on hearing the voices of participants and attending to the depth of the subjects' lived experiences. IPA research does not require large sample sizes, therefore; although the participants' voices and experiences may be diverse, the participants will most likely not be representative of the sociocultural spectrum. In their view of IPA research studies, Reid et al. (2005) found that IPA research subjects were alike in that they could understand the principles of their involvement with the research process, give consent (or assent), engage with the interviewer, and show a willingness to express their experiences and opinions.

Given that IPA aims to capture the experiences and opinions of the research participants, this approach favors semi-structured individual interviews as the data collection method (Reid et al., 2005). IPA researchers are aware that interviews are not necessarily neutral means of data collection (Rapley, 2001). The person conducting the interview is tasked to work with each participant in a flexible collaboration and to identify and interpret relevant meanings that participants use to make sense of the topic. Individual interviews between the researcher and participant can aid in this process; they are easily managed, allow rapport to be built, and allow the participants to explore their thoughts and feelings in a more in-depth and personal manner (Reid et al., 2005). This interview format also provides the researcher with the opportunity to clarify and deepen the inquiry.

In terms of data analysis, the data in an IPA model are the verbatim excerpts recorded and taken from each interview. There are both “insider” and “outsider” analysis components in IPA (Reid et al., 2005). The inductive and iterative procedures of IPA intend to guide the researcher to develop an initial insider’s perspective on the topic through interviewing each subject. This perspective is gained from interviewing and reviewing the verbatim interview excerpts. In the latter portion of the data analysis process, the IPA researcher attempts to make sense of the participants’ experiences and illuminate them in a way that coincides with the research questions. This is done through coding the verbatim transcripts and generating interpretations, themes, and clusters of themes based on the data (Reid et al., 2005).

### **Participants**

Eight adolescent girls of high school age (between 14 and 18 years old) were recruited for this study through convenience sampling techniques. The participants were recruited through two professional connections, including some through colleagues at a local university. The inclusion criteria for participants were as follows: the subject must be a student currently enrolled full-time or recently graduated from high-school, the subject must be between the ages of 14 and 18, and the subject must identify as female, regardless of her sex assigned at birth.

### **Interview Process**

In keeping with IPA protocol, the interviews were semi-structured and designed to explore answers to my four main research questions. I began the interview by formally introducing myself, and asking if the participant had any questions or concerns before we got started. I also reminded each participant that the interview would be audio-recorded so that I could listen to it afterward. Then, I asked each participant several demographic information questions taken from a demographic form specifically designed for this study (see Appendix F).

For example, I asked each participant how they define their race/ethnicity, and asked how many hours they spend on various social media platforms. I then asked each participant question number one from the interview question protocol that was designed specifically for this study. The full list of basic questions can be found in Appendix E. Also, in keeping with IPA methodology, I was flexible in my interview approach and asked various follow-up questions not included on the formal interview question list. This was done so that I could follow-up and delve more deeply into the inquiry with each participant in order to learn more about her individual experience.

The phone interviews were recorded using a portable audio recording device that could be plugged into my laptop using a USB cord. When each interview concluded, I asked the participant if she had any questions or additional information she would like to share. I also explained to her that once the data collection and preliminary analyses were complete, I would e-mail her a de-identified transcription of her responses and she could add comments or clarifications at that time. As part of this process, I also inquired about responses that were unclear to me, asked if we missed anything important in the interview, and asked if each participant would like to add to or omit any part of the transcript. I told each participant that I would wait two weeks for a response, and if I did not receive a response at that time, I would assume she was satisfied with the transcription and I would move forward with the analysis. This “member check” was intended to ensure that I accurately represented the participant’s experiences and perspectives. Out of the eight participants, not one responded to this email. Therefore, I assumed each participant was satisfied with her transcription and I moved forward with the data analysis and coding.

## **Procedure**

The first step in conducting this research study was getting approval from the Institutional Review Board (IRB) at Antioch University New England. Once approval was granted, the first step in the recruitment process was sending an initial e-mail inquiry to two professional connections (Appendix A). This e-mail also included a recruitment flyer as an attachment for the study (Appendix B). In this email, I also asked these connections if they could distribute the flyer to potential participants/parents of potential participants. Once interested participants and parents viewed the flyer, they were invited to contact me directly using the contact information listed on the flyer. I waited about four weeks to receive enough responses from participants and/or parents. Once either a participant or parent contacted me, I asked for both the participant's e-mail address and one parent and/or guardian's e-mail address. I sent an email to each parent and participant and said that I would be sending the parent and participant the consent and assent forms via a DocuSign portal and requested that each person please review and sign the document within a two-week period. I also said that a parent or participant could email, text, or call me with questions or concerns throughout this process.

Using the electronic signature platform DocuSign, I was able to send the parental consent form and, for participants under age 18, an assent form for a minor via e-mail (see Appendices C and D). The consent and assent forms included a description of the project and an explanation of the risks and benefits associated with participating in the current study (i.e., discussing past or present social conflicts could be distressing for the participant but sharing expertise could also be gratifying). The participants and their parents were able to sign the forms electronically. Once a participant and/or parent signed a form, it was automatically sent to the DocuSign account



created for this study. All of the forms were housed securely in this password protected DocuSign account portal.

Once I had the forms completed and in my secure DocuSign portal, I contacted each participant to secure the interview date and time and discuss the process in further detail. Prior to the interview and also via text message, I reiterated some of the important information from the informed consent document, about what to expect: the interview will not exceed one hour in length; the interviews would be conducted via phone or video chat; and each interview would be audiotaped. The interviews were scheduled in the order that I received the completed informed consent and assent documents. All eight participants chose to speak via phone. Given that I was not physically present with the interviewee during the meeting, I could not guarantee that other individuals were not present during the interview. However, I did suggest to each participant that she find a private room to sit in while the interview took place.

At the beginning of each interview, I introduced myself and asked if the participant had any questions or concerns before beginning. Then, I asked each participant the questions on the demographic data form (see Appendix F) and proceeded to complete the remainder of the interview. At the conclusion of each interview, I confirmed the participant's e-mail address and sent her an electronic \$25 Amazon gift card as promised on the recruitment flyer. After each interview, I also began the transcription and data analysis processes. Once I finished transcribing each interview and analyzing the transcription data, I reached out to each participant via e-mail and sent each participant her de-identified transcription. The e-mail also included any clarification questions I had. After I did not receive responses from the participants, I began the remainder of the data analysis process.

## **Data Analysis**

In IPA, there are multiple approaches to data analysis. I focused on various steps and guidelines outlined by J.A. Smith et al. (2009). Although there is flexibility in the IPA model when working with data, the focus is always on making sense of the participants' experiences (J.A. Smith et al., 2009). There are two main goals in analyzing data in an IPA study. The first goal is to try and understand and describe the world of the subject (Larkin et al., 2006). The second goal is interpretive and is intended to provide a critical and conceptual commentary on how participants describe and make sense of their experiences (Larkin et al., 2006). IPA research focuses on how participants' make sense of their experiences and on those actual experiences themselves. The analysis process is time consuming and iterative; it involves several readings of the transcripts, identification of themes, creation of a framework in which to explore the relationships between themes, participant feedback, and consistent reflection on the part of the researcher (J.A. Smith et al., 2009).

### ***Transcription Process***

The first step in the data analysis process was to transcribe verbatim the audio recordings of each interview. I aimed to type each of the transcripts as soon after the interviews as possible. Because I interviewed each subject via phone, I tried to capture sighs and silences or pauses after a question or an emotional comment by the participant in that subject's transcription. I also asked for clarification about what the silence or sigh might have meant when I heard these during the call, to try and capture the emotional complexity of the story.

Next, I read through the document following transcription and corrected any misspellings or formatting mistakes. I also highlighted or circled any mistakes or vague portions of the transcript that might have needed clarification. I made notes in the margins at those places where

I had a question about the accuracy of the transcription. Following this step, I referred to the audio file and listened again to the interview while reading the transcript. During this process, I focused on the places where I had questions about the accuracy of the transcription. This allowed me to check those and make any necessary changes. Once a transcription was finished to the best of my ability, I e-mailed the finished transcript to the participant it belonged to and requested her feedback. Out of the eight participants included in this study, not one responded to my e-mail and so their feedback was not included in the final data analysis process.

### *Analysis of Transcripts*

The second step in the data analysis process was to read through the transcripts, one by one and not simultaneously, without making any notes. By doing so, I began to familiarize myself further with the data without having to focus on identifying emergent themes (J.A. Smith et al., 2009). I then read through each transcript a second time and highlighted various portions of the document that seemed to contain something that was meaningful to the subject. I read each transcript several times, until I felt that I was ready to begin extracting pieces of the data that stood out, and I began to create a working document for each participant that contained these meaning units (Barritt et al., 1984, as cited in J.A. Smith et al., 2009). I made each participant's list of meaning units one by one before moving on to the next transcript/list of meaning units. These meaning units were areas within the text that held a comment or passage that I felt spoke clearly about an aspect of the subject's experience. I created a working word document for each subject that housed her meaning units. I also made notes in the margins of each participant's transcript where I had a question about phrasing, intent of a comment, or where I felt there was a powerful image of what the subject was experiencing (J.A. Smith et al., 2009).

### ***Identification of Emergent Themes***

The next step in the analysis process was to compare each subject's meaning units. Throughout this process, I read through each subject's document of meaning units and focused on similarities. I combined meaning units that were similar, while maintaining the subject's phrasing (J.A. Smith et al., 2009). Meaning units that were similar were merged into a new word document, which became the beginning list of themes generated throughout this comparison process. Themes were shorter phrases or groupings of words created by the participant. In naming the themes, I tried to focus on capturing the essence of each participants' meaning, on both linguistic and interpretive levels (J.A. Smith et al., 2009). I cross-examined the themes I chose and referred to each participant's original transcript and meaning units, to help ensure that the themes I chose matched the experiences of each subject.

### ***Finding Relationships and Clustering Themes***

Next, I examined connections between emerging themes and grouped the themes together according to conceptual similarities. Each cluster was assigned a descriptive label. I compiled themes for the whole transcript before looking for connections and clusters. Some of the themes were dropped at this stage in this analysis process if they did not align well with the emerging structure or if they had a weak evidential base. The final list of themes was comprised of numerous superordinate themes and subthemes (Pietkiewicz & Smith, 2014). The final list also included any divergent or unique themes to ensure that I had analyzed the data thoroughly and included data points that stood out even if they did not fit within a theme.

### ***Seeking Supervision***

Throughout the analysis process, I consulted with a peer to increase rigor through *confirmability* by ascertaining if my interpretations were coherently supported by the data and

incorporated their feedback regarding the themes as they were named, as well as the design of the overall structure. Originally, I had wanted also to consider the feedback I received from the participants in order to strengthen the final data analysis. Given that I did not receive any responses from the participants, I relied on the confirmability check to be my additional layer of supervision.

### ***Reflecting on The Process***

This step in the analysis, although stated last, was something that I did consistently throughout the entire study. I drew on my theoretical foundations as part of this reflection, noting those places where participants discussed the influences of social media on social problem solving. I kept an electronic journal of my continued reflections in a secure, password protected folder on my personal computer. I also kept track of my impressions and any biases that arose throughout the data collection and analysis processes. I chose to incorporate some of these reflections in the discussion section of this dissertation.

### ***Analysis of Demographic Data***

Given the small sample size of this research study, I incorporated a discussion of the demographic data gathered in the results section simply by de-identifying this information and reporting it verbatim from the data sheets for descriptive purposes. I also used this information to inform aspects of the discussion section of this dissertation.

### **Ethical Considerations**

Asking young people to recount experiences of high school social interactions presents potential risk for discomfort and emotional upset. All efforts were taken to minimize this risk and the guidelines provided by the IRB at Antioch University New England were closely followed. The purpose of the study and the study process were explained to

potential participants in detail and all participants were provided with contact information for the researcher and the head of the IRB in case they had questions or concerns during their involvement with the study. I was prepared to use my clinical judgment during the interviews and offer to take a break or stop if a participant seemed unduly upset recounting experiences of SNS conflict, though this did not occur. Additionally, I had the option of providing distressed participants with additional resources for support in their community if those needs arose, which they did not.

Given that this study includes participants under the age of 18, I required both informed consent and assent prior to participation. The consent and assent forms described the nature of the study, the interview process, and outlined possible risks and benefits associated with participating in this study (see Appendices C and D for the consent and assent documentation). I described clearly how information collected in the interviews would be used, how the data would be stored, and how the participant could have removed her information from the study should she have changed her mind about participating. During the interview, I was prepared to use clinical judgment if a participant became distressed in any way, inquired as to what was happening for the participant, and was alert to cues suggesting that she may have wanted to pause or end the interview.

Although IPA research cannot be anonymous, I took certain steps to protect the confidentiality of participants. First, the names and demographic information of each participant remained confidential throughout the study. I did not disclose to my professional contacts who responded to my recruitment flyer; however, I could not control if the participants wished to share this information with others.

Throughout the dissertation results and discussion sections, I deidentified each participant and referred to them only as “Participant 1,” “Participant 2,” and so on, to preserve anonymity. In addition, the audio recording device, transcripts, and any documentation related to the study were kept in a secure lock box and in a password protected computer file on my personal computer. When the study was complete, the recordings, documents, and any e-mail correspondence was destroyed or kept securely until they could they be discarded permanently.

### **Trustworthiness**

To increase the *credibility* of this study, I maintained prolonged engagement with the participants to build trust and rapport, learn about their culture and experiences, and check for misinformation that could stem from distortions introduced by my biases and assumptions. I accomplished this through careful interviewing and then by contacting each participant regarding her individual results throughout the data analysis process, as promised. I also worked to establish credibility of the qualitative data by showing each subject her individual transcript. This would have allowed each participant to judge the accuracy of the recording and transcription processes.

During this correspondence, I provided each subject with rich, thick descriptions of the results from her individual interview to further enhance validity and allow her to make decisions regarding the *transferability* of this data to her experience (Erlandson et al., 1993; Lincoln & Guba, 1985; Merriam, 1988). Throughout the entire data collection and interpretation process, I helped to ensure greater *confirmability* that my themes were supported by the data by having a peer review my study and results to provide an external check on the research process (Ely et al., 1991; Erlandson et al., 1993; Glesne & Peshkin, 1992; Lincoln & Guba, 1985; Merriam, 1988).

### **Potential Research Bias**

I am aware that I have certain biases that could have impacted the research process. Given this, I endeavored to keep an open mind throughout the data collection and analysis processes in order to hear perspectives that were different from my own. For example, some biases I had going into the study were that I assumed that SNS are important to adolescent girls and that they feel connected to these sites in various ways. I worried that much information is lost in online conflict resolution and expected to hear about fights that did not get resolved as easily that way. I assumed that SNS are impacting adolescent female life in ways that may diverge from my high school experience; I expected that the digital natives have a culture that might have been surprisingly unfamiliar to me. In terms of managing these biases, I kept a reflective journal where I described my own experiences, got feedback on my interpretations from participants, and confirmed with a colleague that the themes accurately reflected the interview data collected.

## **Results**

### **Demographic Data**

In the beginning of each individual interview, the participants were asked various demographic questions; see Appendix F for the full list of questions. Given the small sample size, the participants' responses will be summarized in paragraph form as follows. There were eight participants included in this study in total. Despite the small sample size, there was a fair amount of variety amongst the participants in terms of demographic information. The participants ranged in age from 15 to 18; two participants were 15 years old; two were 16 years old; one was 17 years old; and three were 18 years of age (see Table 1 for Age). Two participants were in their sophomore year of high school; two were juniors; two were seniors; and two



participants has just recently graduated from high school (see Table 2 for Academic Year). In terms of race and ethnicity, three participants identified as Caucasian; one participant identified as Asian; one identified as black, white, and Japanese; another identified as African American; one identified as black and Hispanic; and the last participant identified as African American and Puerto Rican (see Table 3 for Race/Ethnicity).

### **Social Networking Data**

In terms of specific social networking statistics, the participants were asked how many hours per day and night they spend using social media. The amount of time ranged from two hours per day and night to five hours per day and night, with the average time being three to four hours spent using social media throughout the day and night (see Table 4 for Hours). The most popular sites used amongst the participants were Instagram and Snapchat (see Table 5 for Sites). Specifically, seven out of the eight participants said they use Instagram and Snapchat the most out of any social media platform. Participant Three said she also used Youtube just as much as she uses Instagram and Snapchat. Visco, a photo editing application, was also mentioned by two participants as being used most often. In terms of other popular sites mentioned, Participant Four said she also used Google quite frequently; Participant Three reported using Twitter at times, though not as much as Instagram, Snapchat, and Youtube; and Participant Eight reported using Pinterest on a daily basis.

The participants were asked to report on how much time, in minutes or hours, they spend playing games on their phone, browsing the Internet, reading information or the news on their phone, watching Netflix or movies, using Youtube, creating and or sending selfies, posting or editing photos, socializing with friends, and engaging in political activism per day (see Table 6 for Time Spent). In terms of playing games, four participants said they never play games on their

phone; one reported playing for 5 minutes; one for 30 minutes; one for “multiple hours”; and one reported playing games for approximately one hour per day. In terms of using or browsing the Internet, one participant said she used Google more so during the school year; another reported using Google for one hour per day; another reported spending “lots of time on Google” but did not say specifically how much time; another reported using the Internet in general for about one and a half hours per day; one reported using the Internet for 30 minutes per day; another for 15–20 minutes per day; another for three to four hours; and one for 20 minutes per day. With regard to reading articles or the news on a device, two participants reported reading material for one hour per day; one reported reading for four hours on her Kindle per day; one reported reading the news; however, she could not report a specific amount of time and said she read articles that pertain to her interests only; one reported not reading at all; and three participants reported reading articles or news within the 10–30 minute range.

Two participants reported not watching Netflix or movies on a daily basis; two reported watching for one hour per day; one reported watching for three hours; one for one to two hours; one for two hours; and one for 45 minutes per day. In terms of using Youtube, two participants reported using this site for one hour per day; one reported using this for two hours per day; one for 30 minutes; one for three hours; one for three to four hours; one for two to two and a half hours; and one reported not using this platform.

In terms of creating and or sending selfies, three participants reported not engaging in this practice; two reported doing this for 30 minutes to one hour per day; one reported spending about 15–30 minutes sending selfies but only when she felt confident in herself; one reported only doing this for about five minutes per week; and one reported creating and sending selfies for up to two hours per day. With regard to posting or editing photos, three participants reported not

posting or editing photos on a regular basis; one reported editing photos on Visco for about 30 minutes per day; two spent one hour engaging in this practice; and two said they used this app for between 30 and 45 minutes per day.

In terms of chatting or socializing with friends, one participant reported she did this for three hour per day; one said between two to three hours per day; two reported socializing for two hours; one said one hour; one said 30 minutes; one said 45 minutes; and one reported engaging with friends for four to five hours spread out throughout any given day. In terms of engaging in political activism, four participants reporting they did not engage in activism on social media, except for possibly reading Trump's tweets on Twitter; three reported doing this "sometimes," but would not give a specific time frame; and one reported engaging in activism for about 30 minutes per day.

The participants were also asked to discuss how much time, out of 100%, they spend engaging with friends, viewing, editing, or posting on social media, viewing their own personal page, and scrolling through social media sites. Most participants reported that much of their time spent on social media was used for engaging with friends, ranging from 30% of their time to almost 100% of their time. This sample reported spending less time viewing, posting, or editing information on either someone else's page or their own page, with percentages ranging from no time at all to one participant reporting she did this 50% of the time. Scrolling through social media was more popular, with four participants saying they did this 50% of their total time spent using social media; one reporting 10% of her time; one reported she did not do this; one said she did this 15% of the time; and one reported she did this for 20% of her total time (see Table 7 for Percentages).

### **Satisfaction with SNS Use**

On the descriptive questionnaire, I used a Likert scale to ask participants how satisfied they were with their social networking site use; how much of their time spent on various SNS has been enjoyable; and whether or not they would like to increase or decrease their social networking practices. Most participants reported that they were somewhat satisfied with their SNS use; one reported not being satisfied at all; one reported being very satisfied; and one reported existing in between not satisfied and satisfied (see Table 8 for Satisfaction Level). This sample ranged in opinions regarding how much of their time spent using SNS has been enjoyable or not. One participant reported that almost all of her time spent on social media has been enjoyable; one said 50% of her time; one reported 75% of her time; one reported none of her time spent using SNS has been enjoyable; one said “most of it”; one reported being neutral; one said some of it was enjoyable; and Participant Six reported a more nuanced account: “it has been enjoyable looking at and editing pictures but the relationship stuff has been aggravating.” Notably, all eight participants reported that they would like to decrease their SNS use.

### **Clusters and Themes**

After the data analysis process was complete, three clusters of themes were identified: Cluster One: Relationship Advantages and Disadvantages, Cluster Two: Navigating Social Interactions, and Cluster Three: Impact of Social Media on Emotional Functioning and Social Acceptance. Cluster One included three themes that focused on the positive and negative impacts of SNS use on interpersonal relationships: Theme One: Promoting Social Connection, Theme Two: Hindering Social Connection, and Theme Three: Promoting Mutual Understanding and Learning.

Cluster Two was comprised of four themes which centered on the various components of social interactions and conflicts that can arise on social media: Theme One: Interpersonal Conflict Online Versus In-Person, Theme Two: Preference of Face-to-Face Communication, Theme Three: Emotional Responding, Nonverbal Communication, and Honesty, and Theme Four: Empathic Understanding and Social Media. Cluster Three included three themes that highlight the various impacts SNS use can have on psychological functioning and social acceptance: Theme One: Body Image and Appearance Comparison, Theme Two: Intersection of Social Media and Mental Health, and Theme Three: Importance of “likes” and Social Acceptance. See Table 9 for Clusters and Themes.

### **Cluster One: Relationship Advantages and Disadvantages**

The first cluster, Relationship Advantages and Disadvantages, reflects participants’ understanding of the role that SNS play in fostering their peer relationships, with a particular focus on how social media allows teens to communicate with one another, connect, and stay in touch despite physical distance. This cluster also demonstrates participants’ thoughts on how despite the opportunities for social connectedness, social media also impacts certain relationships in a negative way. For example, the participants talked about being ignored online and feeling disconnected from friends due to SNS use. Finally, this cluster reflects participants’ thoughts on how social media can promote the exchange of information, and how the participants have been able to learn about their friends through online interactions. Three subthemes emerged from the data within this cluster: Promoting Social Connection, Hindering Social Connection, and Promoting Mutual Understanding and Learning (see Table 9).

#### ***Theme One: Promoting Social Connection***

Seven out of the eight participants discussed this theme. For example, Participant One talked about the value in communicating with friends using group chats through texting: “Yeah, we have a lot of group chats. Group chats are a lot of fun. They make it more engaging because there’s a lot of people to make jokes and stuff.” She also talked about feeling closer to others online: “Like this guy that I’m talking to, we like send funny videos or like cute videos back and forth. I can’t see him every day, so you feel closer.” Participant Three shared similar thoughts regarding group texts: “Yeah, I would say I primarily talk to my friends through a group chat. And I think . . . it’s always felt like a beneficial thing . . . Or not beneficial, but most enjoyable when we’re all in one group chat with each other.” Participant Two discussed how social media has allowed her to become closer with a friend going through a hard time emotionally: “So it just made us grow closer, because I got to understand her more. I didn’t just see that she was upset. I got to know why she was upset.” Participant Eight described what she likes about connecting with others online:

Some stuff that I like about it is that . . . Like my cousin lives in New Jersey, and I’m able to keep in touch with her. And I can see what’s going on in her life, and she can see what’s going on in mine, even though we haven’t seen each other in a few months.

Which is really nice. And keeping in touch with friends and stuff.

Participants One and Two also discussed how social media is important given the opportunities for social connection. Specifically, Participant Two said:

I feel like it’s important, and especially if I feel like I’m getting disconnected from a friend. Like, I learn so much about my friends through social media, and I feel like it’s a way that we can connect outside of school, and sometimes it’s a way to connect to people that I don’t even know. I meet so many people on social media, like friends of friends and

people from other schools that are around the same age or people that I normally wouldn't talk to in a school setting, and I find out that I really have a lot in common with that person. So it's a way to connect to people for me.

In response to the positive aspects of social media, Participant Two also later said that "I think the good part about it is that you learn about people and you're able to connect always."

Participant One explained that social media sites are important "because they help me to make connections with people that I don't know. And I use my Instagram for modeling, so it's definitely got me some jobs and stuff like that." Participants Six and Seven mentioned how they feel connected to others through social media, specifically. For example, Participant Seven said: "Personally, the only ways I really use social media are for keeping in touch with friends." She later went on to describe times when she has felt closer to friends through social media: "It would just be times when I've had friends post something and they mentioned me in it or maybe compliment me in it. I'm like 'Aww. Thanks for thinking of me.'"

Participant Six talked about some of the benefits of social media related to social connection: "I feel like especially when it comes to be my birthday, I'll feel I really know who my friends are...because they post stuff for me . . . On Instagram, or on Snapchat . . . it makes me feel like I'm important in a way." Participant Five had similar thoughts: "I think it's important in my life because sometimes I need to talk to someone, I can't talk to someone at home, [so] I could talk to a friend online without having to meet up with them." Participant Three mentioned that:

I think it has definitely made it easier to talk to my friends or just stay in touch with them. If I can see something that makes me think of them, I send it their way. And I think in that sense, it's important to me.

### ***Theme Two: Hindering Social Connection***

In contrast to Theme One, many of the participants also discussed the ways in which social media made them feel left-out, or more disconnected from their friendships. Participant One discussed the concept of “Fear of Missing Out (FOMO)”: “but like if you see your friend doing something online, and you’re like, ‘Oh I wanted to be there,’ then I guess that makes you feel distant.” Participants Seven and Eight also discussed the concept of feeling left-out or disconnected from friends because of viewing certain content on social media. For example, Participant Seven said: “. . . And with feeling more distant from a friend where they maybe say like, ‘Oh, we’ve got the whole crew here.’ And it’s like, ‘Okay. So I guess I’m not a part of your friend group or whatever.’” Participant Eight described: “I mean you can see when people are like together. Like if you’re not invited places, you can see like videos and pictures. Which is annoying.” Participant Two also talked about how social media has made her feel more distant from her friends, and worried that she has done something to rupture the relationship if she does not get an immediate response online:

And I feel like sometimes social media, it’s disconnecting people in a way, because you get so dependent on just talking to a person over the phone, that, like, you don’t know how to have a social interaction in person. I know, like, if it’s a friend who’s ghosting me, it doesn’t feel great. Like, it feels like I’m . . . sometimes they ghost me for no apparent reason. Like, they just ghost me because they’re away, and it just makes me think, ‘Oh, did I do something wrong?’ And it’s really the case that they are not with their phone. So you’re always worried about doing something wrong on social media if people don’t reply right away.



Participant Two went on to describe how she was unable to converse with a friend following an argument, and how this made her feel less close to that person:

So I had to reach out to him through social media. And it just felt really odd for me... So I felt really disconnected from him in that sense, because I felt like this was, like, a last resort, and I didn't like the fact that the last resort was social media.

Participant Eight discussed how having most of her relationships or friendships take place online would be difficult because the interpersonal connection would not be as strong: "... But if you really only talk with people like online, you wouldn't know them. And I feel like you wouldn't really have like a connection." Some of the participants discussed being ignored on social media as a means of disconnection. Participant Five said:

I think my friend had a conflict with another person and they really ignored her. Just all the way . . . ignored her. And I remember she told me that she felt really upset and angry because . . . people don't like being ignored usually.

In a similar vein, Participant Two described how easy it can be to ignore someone online:

It is a lot easier to ignore someone online, because you can just not open a text, or you can read it and then just log off the website. [In person] you can't just hear someone and just log off on your body. Like, you have to listen.

Participant Six described how social media can prevent individuals from feeling socially connected:

I think a lot of things would be worse if more of my relationships were online....there's so many negative things that come with that because if you're inside all the time, sitting on your phone, you're just starting to be in your head and overthink. And you're comparing yourself to other people, or you're not being social, then you lose out on those

social interactions. And then when you go to get a job, you don't know what you're doing because you don't go out.

She also described the concept of ignoring someone online in more detail, and, how, seemingly all of the sudden, friendship or connection may be lost because of social media:

. . . Then all of a sudden, they just stop answering you, stop texting you. And [maybe] you're imaging this in your head, and you're starting to think about your relationship.

And then all of a sudden, it's like, the rug is pulled out from under your feet because you didn't know any different. And it's just like, you didn't know what you did, or you don't know what, or they were just playing with your feelings. And for us, and for anyone, that's not fair, but unfortunately, it does happen a lot.

### ***Theme Three: Promoting Mutual Understanding and Learning***

One last theme within this cluster that emerged from the data focused on the ways that involvement with SNS promotes understanding about other people's views and cultures that participants would not have known otherwise. For example, Participant One talked about how the site Black Twitter has influenced "the cultural climate of [her] relationships," and how she has used this social media platform to "have more difficult conversations." Participant Two discussed how through social media, she has learned new information about her friends and how this process has changed her view of certain people:

Sometimes I find out stuff about my friends through social media that they wouldn't normally tell me, especially about politics and where they stand . . . and if I find something I don't like that they agree with but I don't 100% agree with, it tends to change my . . . it tends to change how I feel towards them.

She also went on to describe how social media has promoted understanding within her friendships:

. . . But now, people post photos about, like, things that they're passionate about. One of my friends, he is Pakistani, and he posts a lot of stuff about Pakistanian people and how people are treating them. He's posting stuff about how his life would have been if he hadn't moved to America. It helps me understand him more, because it makes me know that he's really passionate about his heritage and that he puts a lot of thought into his life; what his life would have been. So we have conversations about that. It just allows us to open up about a new topic, instead of having these very shallow, like, "How was your day? What classes do you have?" type of conversations.

Participant Three described her experience of having more difficult or controversial conversations on social media: ". . . I think in some ways it's been able to start conversations about more controversial topics. If someone's re-posting, 'I stand with this,' or climate change. But I think in that way we can talk about it."

### **Cluster Two: Navigating Social Interactions**

The second cluster, Navigating Social Interactions, reflects participants' thoughts on the differences between communicating online using social media versus communicating with another person face-to-face. This cluster is comprised of four themes: Theme One: Interpersonal Conflict Online Versus In-person, Theme Two: Preference of Face-to-Face Communication, Theme Three: Communication Aspects and Differences, and Theme Four: Empathic Understanding and Social Media (see Table 9). Most of the participants in this study discussed their preference for speaking to a friend, in person, as opposed to online, especially during a conflict or rupture in the relationship. In addition, participants frequently discussed how aspects

of face-to-face communication, such as nonverbal cues, facial expressions, and tone of voice impact communication and relationship maintenance. They described how these aspects of communication are lost when discussing important or distressing topics on social media. The participants noted the ways they receive emotional support from their friends both on various social media applications and in-person.

***Theme One: Interpersonal Conflict Online Versus In-Person***

Many of the participants discussed the difference in their experiences of having a conflict with a friend online and in person. Several noted the greater ease of having difficult conversations online. For example, Participant One described: “Yeah, I definitely get more confident to confront people online than I do in person.” Similarly, Participant Six discussed how at times, people may feel more comfortable expressing themselves online or making cruel remarks:

. . . people can use it as a place to say stuff that they wouldn’t say to you in person, like, “You’re so ugly” . . . or “You did this” . . . And they’re saying all these things that they could never say in person. But online, it doesn’t matter.

Participant Six went on to explain more about her perceptions between arguing with someone online versus in person:

I feel they’re actually extremely different. I feel in person, people don’t have the guts to say what they’re really thinking. So, for somebody to say it online, I feel it’s like a slap in the face because they’re telling you how they really feel. And I feel they’ll go off more than they meant to, because they’re upset in the moment. Or, they’ll say something they don’t mean. And it’ll just be really negative, and awful . . .

Participant Two also described her experiences of having a conflict with a friend online and how she is more likely to express herself freely on social media:

And I feel like the difference between the two is that when it's online you don't really have an issue saying the words to a person's face. You're not, like . . . you can't see the person, so it's less likely that you're afraid to say something, because you can wait a few days before you see them to get the backlash of it. And you can also think about your response to a person more online than you can through, like, face-to-face, because face-to-face you have to think of a response, like, more immediate.

People can also be more playful about what they say online, though with similarly cruel intent. For example, Participant Four discussed some ways in which online communication can enable people to become more calculated in how they approach social interactions or conflicts:

So I think fighting online definitely gives you time to think of what to say back because in-person, you don't always have that think time and [online] you always have the comebacks right away, which you have time to show other people the comeback and then they help you respond, so it can be worse. So you never know who's on the other end of a phone helping someone else. So in person, it's kind of like, tell me how you feel and that's it because it's the only person in front of you.

Participant Five reported that online, she has found that people can ignore one another more easily during an argument whereas in person, it can be more difficult to ignore the other person or simply not respond:

And you ask them a question, they can just ignore it. Because if you're in person, you ask them a question . . . It's more forward that way . . . And maybe [online] you don't know

what they said for real. Or they could say they're busy and then leave or you could say you're busy and you want to leave.

Participant Six also discussed confronting a friend online:

But there will be times that I do confront people over iMessage if I feel like I do, I can be a little more honest with them because they can't see me. But at the same time, I feel I also will get that in return from another person . . . There can be slight shots taken at people.

Participant Seven discussed the ways writing online can help her to communicate more carefully and intentionally:

. . . like I kind of said, it's easier for me to write things out. I think that any kind of conflict or any kind of conversations online are always going to have me being a lot more analytical and thinking things out and writing it out. Because inherently you have to think more because you have to type it out or read what they say as opposed to if I'm in person I might . . . I'd probably be more emotionally invested. At least how I'm speaking, I would probably do it better or reword things or say something and take it back and stuff like that.

### ***Theme Two: Preference of Face-To-Face Communication***

Another theme emerged amongst this sample regarding the participants discussing their preference for face-to-face communication and/or confrontation. Many of the participants talked about how they prefer to address conflict in person as opposed to online for various reasons.

Participant Five talked about how it is more efficient and easier to express or explain oneself in person versus online: . . . [online there is] "not a lot of stuff you could say. There's a lot of stuff

that you can't really explain online sometimes or it's hard to explain. And you can't really physically do stuff if you're not with the person." Participant One also talked about preferring in-person confrontation regarding a rupture or conflict because she would be better able to describe her feelings thoroughly: "Online it's more frustrating because you have to type everything out, and like spell check and stuff, but in person you can kind of just speak your piece." Participant Two described in detail why she prefers to address conflict in person:

In general, I like to do it as quickly as possible. So whether if that means I have to do it on social media, I do. But I do prefer to do it in person, just because I want to know . . . like, I can tell a lot by a person's facial features and a lot about how they're holding their body especially, like, how they're feeling. I can also tell when my friends are lying to me, just because they have tells. Everyone has a tell, like in poker and stuff. And I've learned how to distinguish that in real life and tell when a person is lying to me through, like, the tells, sort of like poker. So it's a lot easier to tell emotions through a personal interaction with a conflict. So you can really tell if someone's being genuinely sorry or you can tell if a person's really pissed off.

Participant Three similarly described her preference for face-to-face confrontation, even though she does also use social media frequently to address conflicts in her friendships:

I don't know. I think I almost like a balance of both, but ultimately, I prefer in person . . . Yeah, I think definitely in person, I'm a lot more aware of not wanting to hurt their feelings, and I don't get to hide behind a screen or anything, and I can't just opt out of the conversation while it's happening. And yeah, it's just very present and I guess it feels like you have less control over how things are going to go.

Participant Three went on to describe a recent fight she had online with an ex-boyfriend and why this form of communication felt insufficient:

I was just really frustrated by the fact that it was happening over text. And I think it felt very inefficient in terms of actually trying to communicate. It felt immature and . . . Yeah, it was just impossible to try and get off what I was trying to say in a text message.

Participant Eight spoke about the ambiguity of meaning in online communication, she described her preference for in-person conflict resolution because at times, addressing conflict online can feel confusing: “. . . I think it could come across the wrong way online even though it might seem easier at the time. Because you don’t have to face them. But . . . what you’re saying might not come across the way that you mean it . . .” Participant Seven also discussed her reasoning behind preferring to communicate with friends in person versus online: “I completely would rather face to face interaction. Even though, I guess, FaceTime is more similar to that. I rarely FaceTime in general . . .” She went on to say that she prefers to discuss difficult subject matter in person “because anything online it’s just too impersonal for anything that serious.” Participant Five also described that she prefers to address conflict in person because having more intense conversations online can be confusing: “Sometimes things are confusing when you text them because like . . . I don’t know. Sometimes a conversation is a lot quicker than texting.” Participant Eight talked about simply enjoying face-to-face communication: “I definitely like talking to someone in person. It would be like my first choice.”

### ***Theme Three: Emotional Responding, Nonverbal Communication, and Honesty***

All eight of the participants in this study reported on difficulty communicating feelings accurately and emphatically using only text. Some of these adolescents discussed how online,



people can be less honest about their emotions due to a sense of emotional distance and the lack of nonverbal cues like tone of voice and facial expressions.

For example, Participant Eight talked about the lack of emotionality in online communication:

Yeah, I think that when people are online, even if they're just cutting to the point, it looks more like they're angry or upset easier. Because there's no emotion in the text. They just see there's exclamation points or like capital letters that someone's annoyed more easily.

She later went on to say that, "When you're in person, you can see their actual like emotion . . ."

Participant Five also discussed the role of emotional honesty in her online communication: "I think less honest because if there's something I don't want to talk about, I can easily avoid it, I think. Because I mean they can't tell if you're lying by facial features or anything."

Participant Four noted that she liked this ambiguity of online communication: "I feel as though I will kind of say whatever I want and they don't know what kind of tone of voice I'm using." Participant Six also spoke about the differences of communication aspects online versus in person:

I feel in person, you can talk about things, and you realize what your tone of voice is, and you know what you're doing and the impact you're having . . . Through the phone, you can't see the other person's emotion and you don't know what they're going say or think, or do. And for somebody else to say something to you in person, you're going to see their immediate reaction right away. There's no delay, there's no, you got to wait, you don't have anxiety about what they're going to say next, with those little bubbles, it just is.

Participant Three noted that difficulty deciphering the social and communication nuances online made her prefer in-person conversation:

I would say I think I definitely prefer when it's like a FaceTime, or we can actually converse face to face, but I feel like other than that, I like when we're DMing each other or something. We have a group DM that we always send things to . . . I don't really know. I think I just definitely benefit a lot more from talking to people in person, and I don't know, just being able to hear someone's tone, or just being with them, I think it's just more enjoyable for me. So, I don't know. I feel like if more of my interactions were on social media, I don't know . . .

Participants One and Seven talked specifically about the differences in tone of voice between online and in-person communication. For example, Participant One discussed preferring to address difficult topics with friends in person "Because then she can accurately read my tone and stuff." Participant Seven talked about how time consuming and exhausting it can be to communicate online:

It kind of uses up a lot of energy. And just conversations through that, straight off the bat, are way more stagnant. Mostly like putting weird texting styles, like capitalizing for letters and stuff. You can't really get the same kind of tone of speech through that the same way.

Participant Two explained how she and her friends use emojis to convey emotions online:

Yeah. I mean, it's harder to convey an emotion online than it is in person. Because people know I'm very much an open book in the sense of my emotions now, because I learned a while ago that I can't bottle up my emotions, because it just leads to me exploding in a very negative way, which I don't like. So I'm very open about my emotions and how I'm feeling. So if I'm really pissed off, people can tell. Like, my body stances change and my tone of voice changes. So people can definitely tell what emotion I'm feeling in a certain

day . . . Then, over social media it's a lot harder to convey an emotion. Like, you can't say you're really mad, because it just takes away from how mad you are, in my opinion. And you have to add emojis, which takes away from being upset, because that's the only way you can convey a feeling anymore.

***Theme Four: Empathic Understanding and Social Media***

Many of the participants spoke about how they feel supported by their friends both in person and through SNS. They talked about feeling validated by their friends and being able to go to their friends for emotional support and understanding. For example, Participant Two discussed how she is able to provide this support to her friends given some of her personal experiences with emotional struggles:

So I've been through a lot of the things that my friends are going through now, like, with their depression and their anxiety. I went through a lot of that in middle school, so I had the earlier start, per se. So I've dealt with a lot of it. So sometimes my friends . . . I can understand social cues, like, I can read a person really well, and that helps me when I give advice.

She went on to describe how her friends are able to provide reciprocal support to her, however she would not use social media to seek out this type of support or validation:

But a lot of my friends aren't the greatest at giving advice. Like, they make efforts, which I commend them, but usually whenever I'm feeling low I don't really go to social media for support from my friends, because they do make an effort, and I love them for making the effort, but it's just usually not that helpful when they try to, because they don't really have the skill to do it over social media. They can do it in person and stuff, which is great. But over social media it's not as easy, because they can't convey a sense of

concern, or a sense of, like, they're there with you. Because they're sort of there. Like, they're on the other side of a screen. But it just makes me feel kind of just disconnected with the person a little bit when I'm feeling really upset. So, usually, I tend to just read a book or listen to some music to help me when I'm feeling low about myself.

By contrast, Participant Eight spoke about how she feels that social media has not changed how she interacts with her friends or makes her unable to support them, particularly when she is with them in person: "Not really. I don't think it really changes how you can like talk to your friends, especially when you're in person. Yeah, I don't think so." In response to whether or not Participant Six feels like she and her friends provide support and encouragement to one another on both social media and in-person, she responded: "Yeah, 100%. I feel that you basically just summed it up for me. That's basically what we do. And if we're, it's mostly on a private Snapchat story . . ." Participant Eight further spoke about the advantage of SNS for providing and receiving support from friends she sees less frequently: "Yeah. A lot of times I feel like it's easier to since I don't see them on a daily basis or anything."

### **Cluster Three: Impact of Social Media on Emotional Functioning and Social Acceptance**

Cluster Three, Impact of Social Media on Emotional Functioning and Social Acceptance, reflects the participants' thoughts on how social media use has impacted their mental and emotional functioning, self-esteem, and the way they view themselves and/or their bodies. This cluster also includes a description of the influence of SNS practices on peer approval and social acceptance. This cluster consists of three themes: Theme One: Body Image and Appearance Comparison, Theme Two: Intersection of Social Media and Mental Health, and Theme Three: Importance of "likes" and Social Acceptance (see Table 9).

#### ***Theme One: Body Image and Appearance Comparison***

Participant Two spoke in detail about how her social media use and the influences of social media sites in general have affected her body image: “I feel like it’s definitely made my body image a little bit worse. Like, I’m always having a hard time with accepting my body image. And I’ve gone through a lot of self-hate about myself.” She went on to speak about how certain people can expose aspects of their bodies to the world on social media and how these images may not represent the truth, which has made this participant feel worse about her specific body features:

Yeah, it’s not easy, especially because a lot of my friends, they are very beautiful people, and they all are very, in the sense of the word, skinny. And even I know that they have issues with their own body. But seeing them in, like, bikini photos and how amazing they look, it just makes me feel a little bit self-conscious about my own body . . . Yeah, and people tend to edit their photos, which I think is great to an extent. Like, if you edit a photo just to enhance natural features, that’s great. But if you enhance ... if you are editing photos to change something about yourself, that’s ... I don’t really agree with that. I’ve done it to myself, too, and I’ve hated myself for doing it, because it just made me feel worse about my body.

Participant Two explained further that she feels certain social media applications and certain editing techniques are less about exposing certain parts of oneself to the public and more about not accepting oneself: “So having these apps where you can change these things about yourself just makes it a little bit hard, because . . . for me it was more about, like . . . these apps are, like, about not accepting yourself.” Similarly, Participant Six discussed how social media can impact whether or not someone feels appreciated and how at times, people may comment about appearance on social media which makes interactions online more negative:

But I feel like that also is really negative because you're relying on social media to feel like you're appreciated. That comes and goes. And then comes and goes, and then I mean, I think that's really it . . . But then also there's times where it's more negative and it's hard too, people can use it as a place to say stuff that they wouldn't say to you in person, like, "You're so ugly." Or saying "You did this," like, "You shouldn't have done that." And they're saying all these things that they could never say in person. But online, it doesn't matter.

Participants Four similarly discussed how social media has negatively impacted her body image:

. . . [social media has made my body image] definitely worse. Definitely. I feel as though girls definitely tend to just look at social media and go off of that in what they're supposed to look like, and, like, the picture perfect. Yeah, that has definitely changed the way a lot of people think.

In a similar vein, Participant Three described how social media and how viewing certain people online has made her analyze her own appearance; however, this does not necessarily make her feel worse:

Oh, I would definitely say so. I think this happens to me a lot, where if I see someone, usually a model who I think is really, really pretty, I'll be following her and I'll just spend a lot of time looking at her account. And then for some reason, I don't think that I look like that person, but I don't know why, I feel like I've developed their features, and then I will see myself and I'm really thrown off by it. I don't really know how to describe it, but I think . . . I don't know, I honestly wouldn't say that it's made me feel worse about the way that I look or anything.

Participant Eight discussed feeling self-conscious about posting her image on social media; however she doesn't believe this activity has had a big impact on her body image: "I know that some people, they get really . . . self-conscious of posting stuff. And I definitely do. I only post stuff that I feel comfortable posting or that like I like the picture. But I feel like [my body image] hasn't really like changed."

***Theme Two: Intersection of Social Media and Mental Health***

Participant Four described how if she were to spend more time on social media, it would impact her mental and emotional functioning: "Honestly, I think that I'd probably just begin to get more depressed I would say. I feel as though the [human] interaction is something you need and you can't get that fulfillment on a screen." She went on to admit that she wishes she never even had access to social media at such an early age:

If I could change what I do on social media, I would probably not have begged my parents for it so early. My brother and I always wanted it because all our friends have it. I don't think I've gotten anything good out of it. I don't think anyone has.

Participant One further described her dependent relationship with her smartphone: "I think it depends . . . sometimes you really just want a break from your phone, and that can feel good. But if like your phone was dead, and you didn't choose to not be on social media, that can be depressing." Participant Two described in detail how social media has added to her level of anxiety:

Well, I've noticed that when I first started in social media, I was maybe, like, 13, and I started with a Facebook account. Then, Instagram came along, and it was just, like, a site where you can just post photos so you can share your experiences with your friends. And over time it just became a page where you can just show how great your life is. Like, you

don't really show . . . usually, you don't show the negative parts of your life. And, for me, it causes a little bit of anxiety, just for the fact that you see that your friends are doing such amazing things. Then, you feel like you're missing out, or you see models on here and they're telling you you have to look this way or this way in order to be accepted in society. It just creates a lot of negative feelings.

Participant Six also discussed how social media can create anxiety symptoms based on wondering whether to post a certain picture or certain content: "It causes so much anxiety, like do I post it? Do I look okay? Whatever it is."

Some of the girls spoke about the complex role of social media in conversations about mental health. For example, Participant Two talked about the variety of mental health issues that she and friends address on social media:

Occasionally, I have conversations with my friends about their mental health, because in my friend group my friends like to talk to me about this stuff, because I've gone through a little bit of mental health issues when I was younger. So I've dealt with the issues of, like, therapy and going through, like, finding ways and strategies to help myself and situations. So they usually ask me questions. They call me the group therapist. I usually am the person that they ask for advice.

Participant Two also described how mental health issues can be taken for granted on social media sites:

It was when I was in middle school. I was dealing with a lot of mental health issues. I had just come out of the hospital. I just noticed how people were being really insensitive. Like, this is an everyday occurrence, where people are just saying, like, "Oh, I'm just going to jump out the window," or, "I hate school. I'm going to kill myself." Like, sort of



those things, that they sometimes make jokingly, obviously. Sometimes they don't. But for the most part, most people mean it jokingly. They say it's supposed to be like a metaphor or a simile or something, and they are just . . . And I would see these posts being like, "I fricking hate school. I'm just going to go kill myself," and blah, blah, blah, or, like, someone showing off how great their life was, and at the time my life wasn't as great and it made me feel really crappy about myself. So I just decided, "You know what? I'm just going to delete the app in general."

Participant Four went on to describe how responses on sites such as Snapchat can make someone feel: "Yes, because definitely with Snapchat, you can see their response and then you can replay that response to see it again. Kind of make you feel worse, but you kind of do it to yourself."

She also reported that "I do think people's response can definitely affect you . . ." By contrast, Participant One discussed how social media has intersected with her mental health and self-esteem, in particular, in positive ways: "And I think having a big platform makes me feel good about myself because I get a lot of responses from various people."

### ***Theme Three: Importance of "Likes" and Social Acceptance***

Most of the participants in this sample discussed how important it is on social media to receive "likes" on posts. They pondered on wanting social acceptance and validation for what they are posting, thinking, feeling and doing. In many cases, deciding whether or not a participant will get "likes" on a post influences her decision about whether or not to post something at all. Participants Three stated:

I definitely would say that I'll choose a certain photo or edit it a certain way in consideration of, oh, people will like this more, I guess just so it's like, oh, will people like it? And I want people to like my stuff, I guess.

Similarly, Participant One talked about constantly thinking about receiving “likes”: “I think when you have a bigger platform too, you think about that a lot because it’s hard to accurately tell your demographic. Yeah, if you want a lot of engagement, if you’re using Instagram for things like modeling.” Participant Two further shared her perceptions about how “likes” might influence others to think about her:

Yes, for a lot of reasons. I feel like if you don’t get a lot of likes . . . I hate this about posting photos, but it’s always something I’m always really concerned about. It’s like, if I don’t have an innumerable amount of likes, people just assume that I’m not as popular, like I don’t have as many friends. Which is not true. But that’s how I perceive people to look at me. Because when they look at . . . I know I look at people’s posts and be like, “Oh, that’s a lot of likes. They must have a lot of followers.” So that’s how I perceive other people sometimes. And I know that followers aren’t always friends, and followers are just random people sometimes and they don’t really care about you. But it does make it a factor. Like, I always choose the photo that I think looks nicest out of all the photos I could pick.

In the same vein, Participant Eight also described how she and some of her friends were concerned with followers and how many “likes” they get on social media: “I’m not as concerned now, but I was for a while. I was very distracted [by] how many “likes” you get on a post. Do I like take down the post if it doesn’t get like your average amount of ‘likes?’” Participant Two also discussed how posting “for likes” is a large factor of one of the major social media platforms, Instagram: “That is a big factor about Instagram, because a lot of people post for “likes,” and not really posting, just sharing experience.”

## Discussion

### Summary of Methodology Questions and Major Findings

The research questions explored throughout this project were: (a) How do SNS hinder and/or promote relationship development amongst teenage girls? (b) How do SNS impact how adolescent girls address conflict in their friendships? (c) How do SNS affect adolescent girls' empathic understanding and responding? (d) How do adolescent girls use SNS to navigate their social worlds? These questions were explored through semi-structured interviews using a sample of eight participants.

This study yielded six major findings. First, with regard to connection and disconnection, seven of the participants described how SNS improve relationships through promoting social connection. These participants discussed how social media allows them to stay in touch with friends and therefore maintain these relationships, both with friends they see often and those with whom they may not be able to spend time with on a regular basis— on summer break from school, due to geography, or in instances when friends attend different schools.

Interestingly, the second finding suggests that this is a complex question: most participants also gave voice to experiences of disconnection through their time on social media. They spoke about the pain of feeling ignored and left out on social media and sometimes experiencing greater disconnection from friends and relationships as a result of their time on SNS. A third major finding was that all eight participants in this sample use SNS to stay in touch with friends, to communicate, share or learn information, and/or maintain relationships and are spending a significant amount of their free time online.

When asked about conflict and connection, notably, all eight of the participants reported that they prefer to address conflicts or difficult topics with their friends in-person as opposed to

on social media. Some of the reasons behind this fourth major finding were that these adolescents valued a fuller range of emotional communication, including nonverbal cues and facial expressions, which are absent from online interactions and lead to misunderstanding. Most felt that, in-person, they could be more honest and emotionally connected to their friends. Lastly, seven out of eight participants reported that they both give and receive support from friends in person and on social media; they didn't use the word empathy, but they described it in action both on- and off-line.

### **Research Questions One and Four**

The first research question focused on how SNS hinder and/or promote relationship development for teenage girls. The fourth research question aimed to discover how adolescent girls navigate their social worlds on social media. Given that the participants spoke about how they use SNS to navigate their social worlds in various ways throughout the interviews, the discussion of that research question was included first instead of last. Seven out of eight participants discussed how social media has made them feel closer to friends, mainly because they are able to discuss various topics online and maintain a connection to friends. This coincides with previous research on the benefits of social networking practices for adolescents, which included a discussion around how SNS offer teens the chance to make and sustain interpersonal connections and express themselves (Gabriel, 2014). The eighth participant's discrepant view described very limited interest in social networking; she used SNS infrequently and therefore did not think she receives many benefits from them for fostering her peer relationships. In terms of relationship promotion, some of the adolescents also discussed how social media has expanded their connections to other individuals outside of their immediate schoolmates and regular social circles. These participants reported on how SNS helped them learn about other people, meet new

friends, and make professional and personal connections. They observed that they would have been unlikely to ever meet this broader range of peers without SNS.

It is consistent with Gilligan's developmental framework to find that SNS can be so important for adolescent girls striving to find and sustain connections. Maintaining relationships with friends throughout adolescence is crucial and a necessary and healthy part of development. In particular, close and intimate adolescent friendships can improve a young person's ability to trust others, build other relationships, and improve psychosocial wellbeing (Rubin et al., 2004). It seems therefore that SNS could be allowing adolescent girls to engage in the consistently positive and important developmental task of forming friendships and relationships outside of their family support network.

Some of the participants explored how SNS can promote relationships and friendships because of the ease of access to information and communication that can occur through social media. For example, some of the participants spoke about how they learn new information about their friends online that they did not know previously. They may learn about certain topics such as where their friends stand politically or how their friends identify in terms of their values or cultural beliefs. These findings also support the existing research on this topic, particularly around how SNS provide users with a virtual platform through which to gather, connect, and share information and ideas (Raacke & Bonds-Raacke, 2008). This is an interesting finding because it suggests that perhaps the very nature of social media has allowed for a greater and more seamless exchange of information on- and off-line within relationships for adolescent girls. This could be the case for other generations, although there will likely be differences in their social networking practices compared to digital natives. Social media allows for a seamless and

near-constant exchange of information among online users. Online, adolescents are also able to view and digest information that they would never otherwise be exposed to.

The participants in this study spoke about the ways that SNS added to the intimacy of their close connections. Could the more impersonal nature of social media—at times not being able to see a person face-to-face—be allowing this generation to learn more revealing details about one another? It is possible that girls may be self-disclosing more to one another than in previous generations, perhaps sharing details they would be too bashful or hesitant to speak about in person, fearful of seeing the response they may receive from peers.

Though most of the participants reported that social media promotes relationship development in many ways, six also discussed how certain experiences and situations on social media can also make them feel disconnected from their friends. In many ways, their views echo the equivocal research literature concluding that there are both positive and negative aspects of social media use. Because the questions of benefits and detriments seem so personal, it is hard to generalize about whether SNS use helps or hinders social connection and belonging.

Indeed, despite their intense social engagement online, many of the participants talked about how social media had made them feel less secure and caused them to question some of their relationships and friendships. These participants described the sadness they feel when, for example, they see a certain post or picture on social media about an event from which they've been excluded, and then wonder if the people involved are really their friends. These types of posts may make certain girls think, "Do my friends even like me?" or "guess I am not one of their *real* friends because I was not invited."

Some of the adolescents also talked about feeling left out of social situations when they saw particular content, when friends responded too slowly to something they'd written or posted,

left a conversation when it was incomplete, or ignored them on SNS altogether. Given how much time these adolescent girls spend on SNS per day and night, it is clear they have constant access to what their friends are doing (or not doing) without them. This culture of sharing lives as they are being lived seems to be capable of creating both a sense of gratifying social closeness and at other times, an equally intense experience of rejection and isolation.

Participants struggled with the mixed effect of being “logged in” all of the time: online, they could be there for a friend in real time, and also ignore someone else completely. Online, when someone does not respond to a message (and it is generally assumed they’ve read it since everyone else is usually online, too) they have a kind of power to create or maintain distance within the relationship. In this way, a girl who texts or posts is putting herself out there explicitly for a response. She is apt to feel distressed by the silence, whether this was the intended goal or not.

Ignoring friends online has created the phenomenon called “ghosting,” a potent method of indirect social aggression. The decision not to respond to texts can often feel like the severing of relationships offline, too. Some of the participants talked about how ghosting can be (understandably) frustrating leading to distressing feelings such as worry, confusion, and anxiety. Of course, it is possible someone believes, incorrectly, that she has been ghosted when, in actuality the reader was actually busy doing something else. In the fast-paced instant-response culture of SNS, the girls in this study did not readily imagine that more benign interpretation of events.

These participants seemed to be self-aware about balancing the proportion of their time spent socializing on- and off-line. Notably, a few observed that their lives would be much worse if they spent too much time just communicating with friends online. They spoke about how they

needed the in-person part of the relationship and expressed concern that they might not really know their friends in a more intimate way if they were only able to speak to them through a screen.

One of the most interesting and surprising findings arising from this research is the desire among all participants to decrease their use of SNS. This revelation leads to other questions. For example, if girls are using SNS more hours than they'd like, why don't they just stop? How volitional is their online life? Do they feel socialized, excited, or compelled to stay this engaged with peers while also aware of the stress, self-doubt, and anxiety that they recognize are real costs for them? It is likely that the costs and benefits of trying to sustain relationships online are further complicated by a different kind of relationship—seductive and addictive—with their devices, too. It is complex because girls experience anxiety when they do not know where their phone is— even when they feel hurt and left out looking at it and even if they wish they could use it less.

### **Research Question Two**

Research Question Two aimed to address how SNS impact the ways in which adolescent girls address conflict in their friendships. Several participants discussed how addressing conflict online has advantages because it can be more effortful and planned out. For example, on social media, one has the chance to review and edit any written material before hitting the send button. These adolescents talked about how addressing conflict and responding online takes a different set of skills. Online, girls are able to take more time editing and thinking about how to structure or word a response. This is quite different from addressing conflict face-to-face because in real life, people do not have ample amounts of time to perfect or type out a rebuttal. Some of the participants also discussed how when they address a conflict online, they may be more honest



with their friends. This finding is interesting because it seems that these participants were commenting on how the very nature of conversing online can allow for more free-flowing conversation. Some girls may be able to express themselves more freely if they can hide behind a screen.

It is important to note how some of the adolescents in this study may be more inclined to be open and honest with friends or others about their feelings during a conflict on social media because they are not able to actually view the other person's reactions or emotional responses. One girl, Participant Seven, discussed how she could be more honest with a "crush" on social media because it is easier for her to reveal her heart from a distance: "[The only] ways where I prefer using social media for communication would probably be if I'm trying to talk to someone that I like. And it's just like easier to talk about feelings, for me, through typed-out words."

By contrast, many participants discussed the ways in which they can express themselves more freely in-person as opposed to SNS. These girls spoke about how nonverbal components of emotional responding that occur during face-to-face interactions play a role in their level of honesty. For example, they discussed how in person, they can view another person's facial expressions and can interpret her tone of voice, all of which are lost during communication on social media. Therefore, these participants wanted to be able to interpret nonverbal aspects of communication so they could be more open and clear communicating with their friends. Indeed, all of the participants described the advantages of speaking in person about more emotional topics.

I was particularly interested to learn that girls preferred addressing conflict or confronting a friend using face-to-face communication. Some of the participants talked about how they have felt annoyed, sad, or frustrated in the past if they had to discuss important topics or a conflict

with a friend online because it felt too impersonal to be effective. Despite being online throughout the day and having constant access to their social worlds, this group of adolescents still prefers to do most of the heavy lifting in-person as opposed to online. This is an interesting and important finding because it challenges long-held assumptions about adolescent girls' preference for handling conflict through acts of indirect social aggression instead of direct confrontation (e.g., Underwood et al., 2009). Although they do text and post in socially-aggressive ways on social media, it is heartening to note that most of the participants in this study clearly prefer to address conflict and sustain emotional connection via face-to-face interactions.

### **Research Question Three**

Research Question Three focused on how SNS use may be impacting adolescent girls and their ability to empathize. These participants did not use the word empathy explicitly, nor did they discuss topics of interest to researchers such as emotional understanding or emotional responding. They did describe the value they place on their close relationships and the work they are willing to do to sustain these connections.

Indeed, seven out of eight participants discussed how they feel supported both on- and off-line by their friends. In turn, many of the participants spoke about how they are able to provide reciprocal support to their friends both in-person and online. Just one participant, who seemed less under the spell of SNS, had a different opinion. She noted that she is willing and able to provide support to her friends in-person and also, at times, has sought their comfort, too. However, she described that she did “not have sympathy” for anyone who posts about their struggles or feelings on social media. This response seemed more in synch with the sentiments of digital immigrants who make a greater distinction between their private and on-line lives.

It is important to note that participants did not literally discuss how their ability to empathize with another person or their friends may be impacted by SNS use. Instead, they spoke more about how they prefer face-to-face interactions with friends because they are able to notice and interpret nonverbal cues, an ability that is lost within electronic forms of communication. These participants spoke about enjoying seeing another person's facial features and being able to interpret more subtle cues of communication such as tone of voice. Therefore, even though these participants may not have explicitly spoke about empathy, it seems they still prefer to interact with friends and other human beings in person because it is more intimate compared to communicating with a person online.

These findings also suggest that teens value experienced aspects of emotional communication— some of the key components of empathy. This finding—along with participants' stated preference to sustain friendships and resolve conflict in person—is significant because it runs counter to some of the more worrisome aspects of SNS use. For example, Turkle (2015) discussed how teens may prefer to connect with friends online and from a distance, leading to a concern that digital natives may be moving away from forming closer friendships that are deep, long-lasting, and intimate. The data from my study suggest that some teens continue to desire close and intimate in-person friendships; indeed they actually prefer to address more serious or emotional topics with their friends face-to-face.

The participants in this study demonstrated that empathy is a complex and multidimensional construct. They appeared to be describing their desire to have emotional conversations in person with others, and felt bad that so much conversation was conducted online. They sought affective empathy because they wanted to be able to share and experience others' emotions (Mehrabian & Epstein, 1972). They described how it can be difficult to share

emotional experiences online because of the inherent distance and impersonal nature of online interactions. This sample of girls seemed to hold empathic connection with friends as a deep value. They describe in both their on- and off-line lives many of the most important empathic qualities, including, for example, an ability to respond to others' emotions, to be supportive, and to console (Hoffman, 1993; Rieffe et al., 2010). Overall, it seems as though most of the adolescents in this sample are still able to empathize with their friends despite consistent social media use; in fact, they prefer to do so in person because of the more intimate nature of face-to-face interactions.

### **Additional Findings**

There are two other notable findings emerging from this qualitative inquiry: the impact of SNS use on mental and emotional health and the importance of SNS for peer or social acceptance. Five of the girls in this study spoke about how social media use has impacted their body image or has made them feel more self-conscious. Some discussed how certain applications can, perhaps unintentionally, promote body dissatisfaction because they encourage users to edit or change their appearance. Participants spoke about the use of filters on various social media applications, describing how users are able to edit or alter their appearance, creating in some sense a false sense of reality that can then be distributed to the outside world. This finding is consistent with the research in that SNS use has been shown to increase body dissatisfaction among teenage girls because these sites allow girls to compare their bodies to those of their peers or more "ideal" body types (e.g., Hew, 2011). In addition, exposure to peers who closely match the thin ideal has been found to increase body dissatisfaction (Krones et al., 2005).

In terms of mental and emotional health, some of the adolescents in this study spoke about how social media can make them feel anxious, depressed, or overall worse in terms of their

mood. Some participants discussed how being on social media more often may make them feel depressed. Others talked about how social media can create some anxiety around whether or not to post a certain comment or picture. These findings are all consistent with various research studies that have focused on the deleterious impact of SNS use on teenage mental and emotional health (e.g., Twenge, 2017). This sample discussed how viewing pictures of their “skinnier” or more “beautiful” friends has made them question their own beauty and aspire to certain standards of “what’s hot and what’s not.” Viewing this type of content has made some of these participants feel insecure and upset about who they are and how they look. Some spoke about how anyone can change their appearance on social media to look a certain way through editing and filters. It seems this group has had more of a negative emotional response to specific edited pictures posted by their friends or by people within their social sphere compared to content posted by strangers (e.g., photographs of celebrities or models).

This finding is interesting considering much of the literature has focused on the toxic effects of celebrity culture leading to negative body image and disordered eating behaviors among adolescent girls. Even if models and celebrities are still implicated, the girls in this study also emphasize how much worse they can feel if the touched-up photos are of people actually involved in their lives in a personal way.

Half of the participants also discussed the complexity embedded in the “liking” of a post; they discussed how this form of social approval seeking can create some discomfort and anxiety. These participants spoke about how they will pause before posting a picture on social media because they consider and fret about how it will be received by their friends and peers in general. This finding supports existing research suggesting that adolescents can use social media as a way

to display a curated version of themselves to the outside world—a version that may not actually exist in real life.

Also consistent with previous explorations, this finding highlights the idea that teens may only post certain photos with the explicit intent of seeking approval from peers. Some researchers even suggest that gaining peer acceptance online and receiving “likes,” activates certain reward systems in the brain and therefore could encourage and reward this type of posting (Meshi et al., 2015). This is important for practitioners involved with this population because of the emotional and psychological toll that “working for ‘likes’” may have (or already has) on this generation. Engaging in these behaviors and constantly wondering and worrying about how one’s personal information or content will be received by peers can become exhausting and emotionally taxing, to say the least. It seems adolescent girls may be at a greater risk for psychological impacts such as low self-esteem, anxiety, and depression if they continue to only consider what feedback (or rejection) they will receive from their friend group as opposed to focusing on supporting face-to-face friendships and their own mental health.

### **Interesting Differences**

As is central to the qualitative methodology I used, I noted findings that were discrepant from the common themes and from my own expectations. For example, Participant Four discussed how her friends and other people in her life reach out more on social media, an experience that was not expressed by other individuals in the sample. Participant Four said: “Definitely, yeah. Yeah, and there’s also people that see your story that you’re just not close with, or you just kind of know them. People definitely reach out on social media more than they do

in-person.” This is important because although social media clearly contributes in many ways to promoting communication in seamless ways, the other participants did not mention how easy it can be to reach out to friends and other people on SNS. Participant Four also distinguished herself from the rest of the sample by noting that she does not reach out to support people on social media: “Honestly, no, not at all. I have no sympathy for people that put their feelings on social media.” This is significant because it seems Participant Four had a fairly strong reaction to questions regarding empathy and emotional responding; she even went so far as to say that she has no sympathy for individuals who express feelings online.

One final discrepant finding expressed by Participant Three had to do with her personal dilemma around the dialectic of needing social media and questioning why she even uses SNS at all:

Well, I think I definitely consider why I even have social media a lot, because I think to me it feels like, oh, I don't really need it. But I definitely would have a hard time just being like, oh, delete my account. I just don't think I could do that, just because I am really attached to it. But yeah, I don't know. I think for some reason it's important to me that I have a presence online. Even if I'm not super active, it's like, oh, I have to be on Instagram, I have to have a Snapchat. I don't know.

This is significant because this participant was talking about her need to have a presence online, and, at the same time, she has begun to question her social media practices. Though just one voice, it may offer a concise summary of the dilemma many girls interviewed appear to be grappling with: how much time do they want to spend online and how much do they need SNS for their social survival?

## **Implications for Clinical Practice**

The findings from this study may provide some sense of hope and guidance for practitioners working with adolescent girls. Though they use various SNS for multiple hours per day, girls still continue to value the deeper human connection that can really only be found through in-person interaction and contact. This is good for them, us, and the therapeutic connection. They may have less opportunity and practice in resolving conflict in person. We can help them learn these vital life skills and be aware that they may indeed prefer to address conflict within their friendships in person as opposed to online but may need to develop both the courage and skill to do it.

Parents and other adults who are involved with this generation often complain of teenagers “being addicted” to their smartphones and to social media in general. Perhaps this is a case of deflection; a growing body of research suggests that adults are on their devices just as much as teens (Ohlheiser, 2018). And even if we are all online too much of the time, it is important to be cognizant that at least some adolescent clients will still prefer to maintain their relationships the “old school way.” Therapy can help both through guidance and enactment. Adolescent girls still find value in emotionally rich and nourishing face-to-face interactions and we can support their sense of efficacy, empathic attunement, and courage in repair.

SNS have also taken their toll on our adolescent clients, and here, too, therapists do well to inquire about the pain and worry attendant to participation on social media. My sample discussed feeling left-out, depressed, anxious, and having low self-esteem or negative body image because of either the content viewed on social media or because of certain practices (such as ghosting) that occur online. As Participant Two suggested, therapists would do well to ask more about social media and the impacts it is having on adolescents in general. Participant Two



said she enjoyed the conversation during her interview with me, “because I don’t really talk to anyone about social media per se and how I feel about it.” She spoke about how there is a lack of opportunities for young people to discuss social media openly, other than lectures at her high school which she described as adults chastising young people for their overuse of social media instead of actually listening to what they have to say and inquiring about why it is important to them.

### **Limitations of the Study**

One obvious limitation of this study is the small sample size. Given the qualitative methodology, the results from this study cannot be generalized to adolescent females as a whole and only reflect the thoughts, experiences, and feelings of eight members within this generational cohort. In addition, the results cannot be generalized to diverse individuals and do not address issues of race, ethnicity, ability, sexual and gender identities, geographical location, and socioeconomic status.

Another limitation of this study is the potential bias of the researcher. As is typical with qualitative research, there will always be some level of potential researcher bias that can impact the design of the study and interpretation of the data. One major bias I had was that I assumed SNS were monumentally important in the lives of adolescent girls. I felt that the participants would be interested in speaking with me about social media given how much I assumed they engaged with this platform on a daily basis. Therefore, going into the individual interviews I was prepared and hopeful about receiving valuable and important feedback from this sample. I also had certain biases around the potential negative impacts of SNS on adolescent female life, particularly with regard to the potential impact these sites can have on self-esteem, body image, and interpersonal functioning. I believe in many ways that the literature informed some of these

biases given that an extensive research base exists that highlights both the negative and positive impacts of social media on adolescent girls' development and functioning.

In order to help minimize some of these biases, I was committed to prolonged engagement with the research data. I aimed to create interpretations, clusters, and themes that grew directly from the data and the lived experiences of the participants themselves, rather than from my own feelings or agenda. I also kept a reflective journal throughout this process and wrote down various biases, thoughts, and feelings throughout the project with the hope that by doing this, I would be held more accountable and aware.

### **Directions for Future Research**

It will be interesting and important for researchers to continue to examine the impact that social media and social networking practices may be having on digital natives. Though there has been much speculation, we do not yet know much about the impact of social media use on adolescent brain development, nor the long-term impact of early deep engagement in SNS and later relationships both on- and off-line. Social media is not going away; these platforms are here to stay and will likely only become more ubiquitous and advanced. Practitioners who work with younger generations need to be prepared for how consistent, and, at times, constant use of social media could be impacting their developmental well-being, mentally, physically, emotionally, and socially.

Though SNS are here to stay, it is possible that social media could change in response to the needs and demands of younger users as they mature. It would be interesting to explore what and how they would like to address the elements of social media that they find most distressing. Would they want to keep social media applications the same, or in some way change these platforms? How and when will their desire to spend less time on social media be translated into

action? Are there important interventions with cell-free times every day that would benefit whole families? Finally, it would be useful to determine how therapy might best help adolescents explore and commit to a balance that favors face-to-face over virtual relationships.

### **Reflections**

Throughout the study, I kept a journal where I would jot down some of my biases and impressions about the study and data as I noted them. I kept thinking throughout the beginning of each interview that I felt as though most of the participants were not being truthful about how much time they actually spend on social media each day and night. My suspicion, based both on research to date and my own clinical sense, is that they might have underreported their time online. I think it may have been a bit cumbersome for me to ask these types of questions over the phone—paralleling the girls' greater desire for the additional data provided by in-person interviews.

I think the methodology might have been stronger if I had also had participants fill out a physical questionnaire prior to the interview. This way, they may have had more time to think about how many minutes/hours they spend on each application and on social media as a whole. I might have asked them to keep a usage log for a few days to obtain even more detailed reports. I wondered if girls could have been underestimating how much time they spend on social media because—also paralleling the findings—they desired my approval and feared my judgment. They could also have felt embarrassed or shocked to actually admit how much time they use SNS. In addition, it may have been difficult for them to estimate amounts of time without having time to think about this and then write it down using a visual aid.

I was also interested, though not surprised, throughout the inquiry to find that none of the participants mentioned Facebook. As is consistent with the research, older generations compared

to digital natives report using Facebook far more often. Therefore, this is consistent with the research and also may comment on how social media platforms, once adopted by elders, will continue to be discarded by younger generations.

Regardless of whether or not these adolescents were underestimating the amount of time spent on social media, every single one of the participants said they wanted to decrease their social media use. I had some reactions to this finding mainly centered around how upsetting it is that society has created this dopamine-rich beeping and vibrating addiction to media use. I noted my concern that young people do not know how to limit their SNS use; I think it has become so ubiquitous, most cannot imagine not having it close by and ready for instant use.

I was pleasantly surprised to hear that all of the participants in this sample prefer to address conflict or have more emotional conversations in person. I think this is important for clinicians and other adults who interact with teenagers to know. At times, adults (particularly, perhaps, parents who cannot get a response out of a daughter using SNS) can be quick to assume that the younger generations do not have certain socialization skills. It is easy to blame their immersion in social media. I assumed this myself. I also assumed that some teenagers do not have the ability to take ownership for their actions nor do they want to be confronted about anything that could stir up uncomfortable feelings for them. I am glad to be wrong on this score. It seems this generation, at least with their friends, still prefers to have uncomfortable or intense conversations in person because they do see the value in communicating with a person face-to-face. They still do know that more may be accomplished or understood during in-person interactions. This gives me hope and renewed excitement about working with adolescent girls in a future where the presence of social media and the human desire for authentic connection are both guaranteed.

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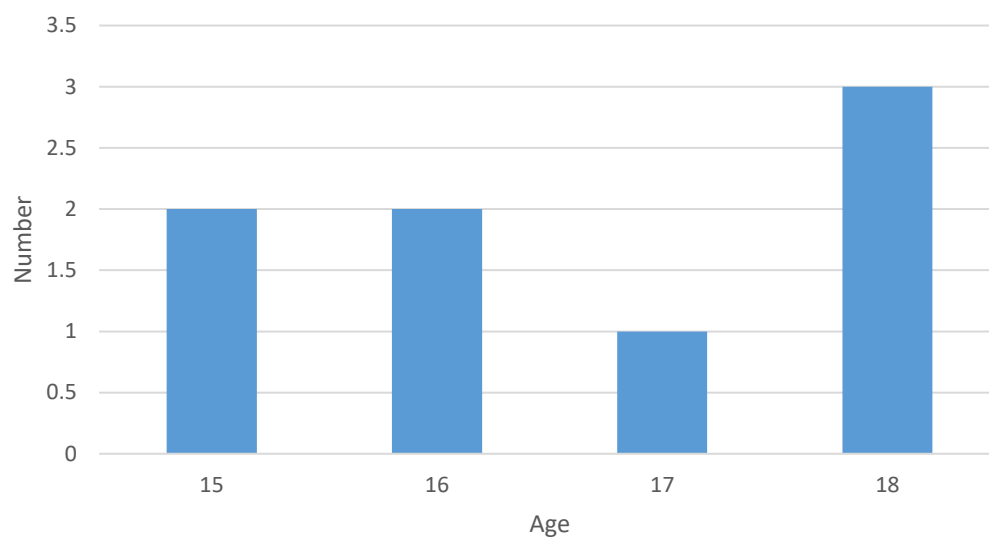
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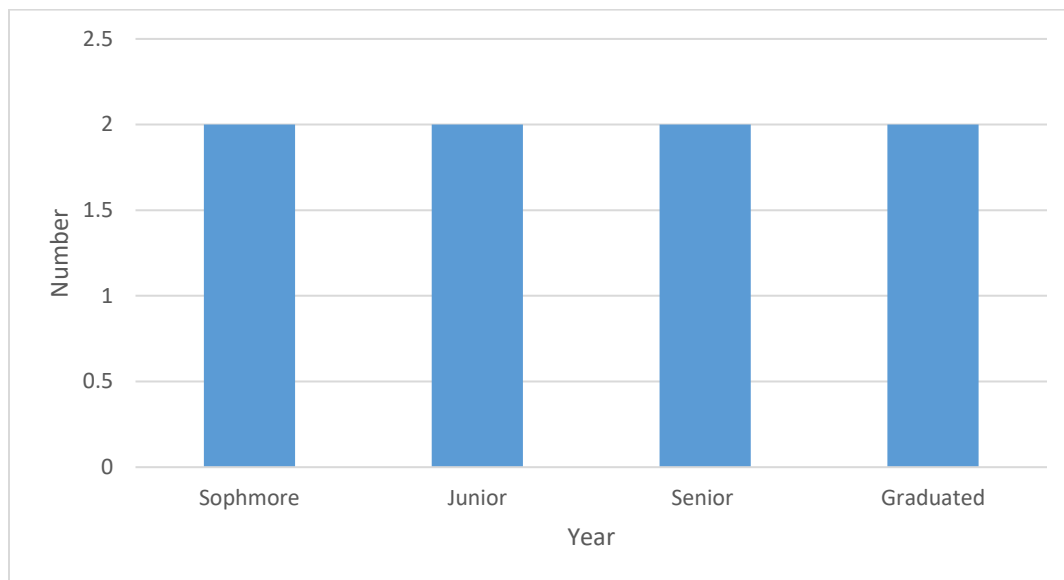
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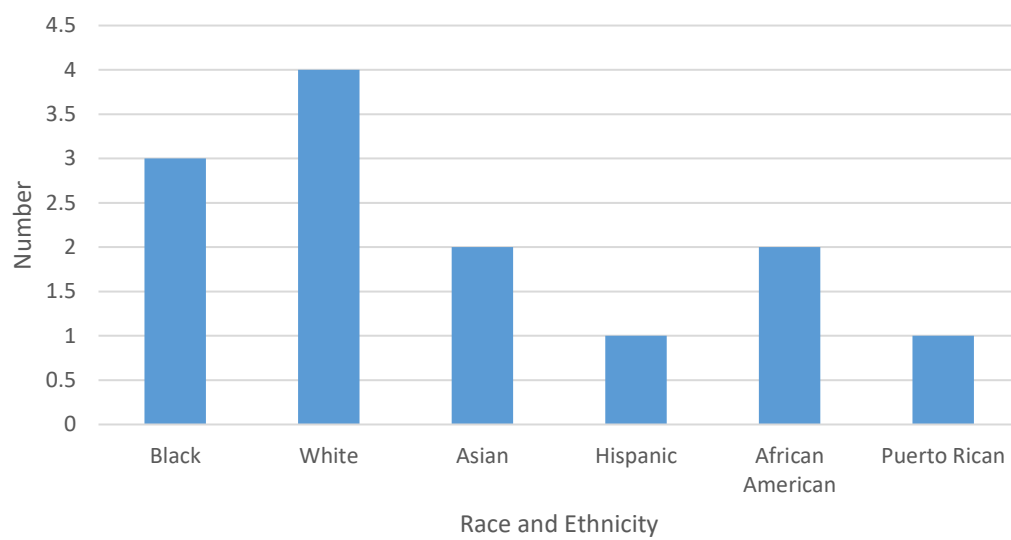
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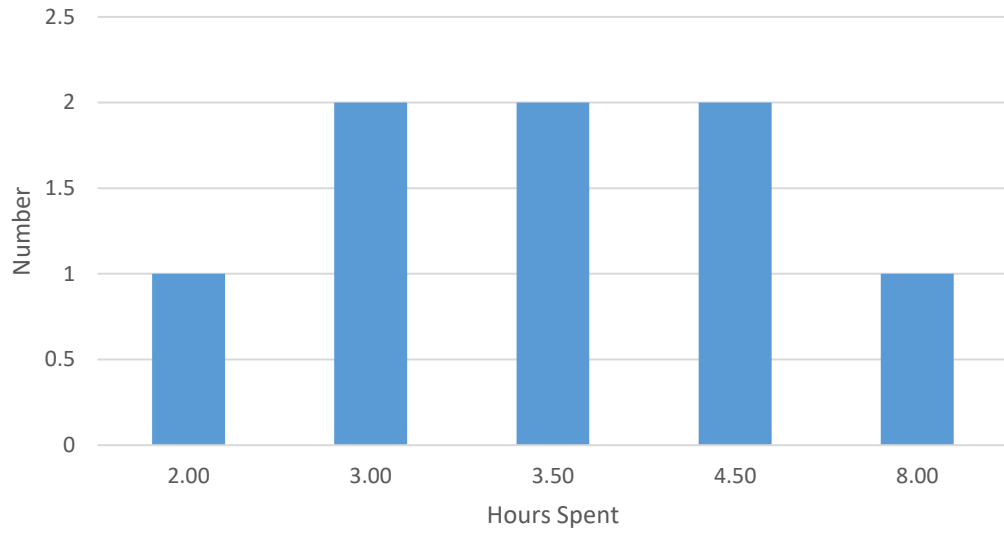
**Table 1***Number of Participants by Age*

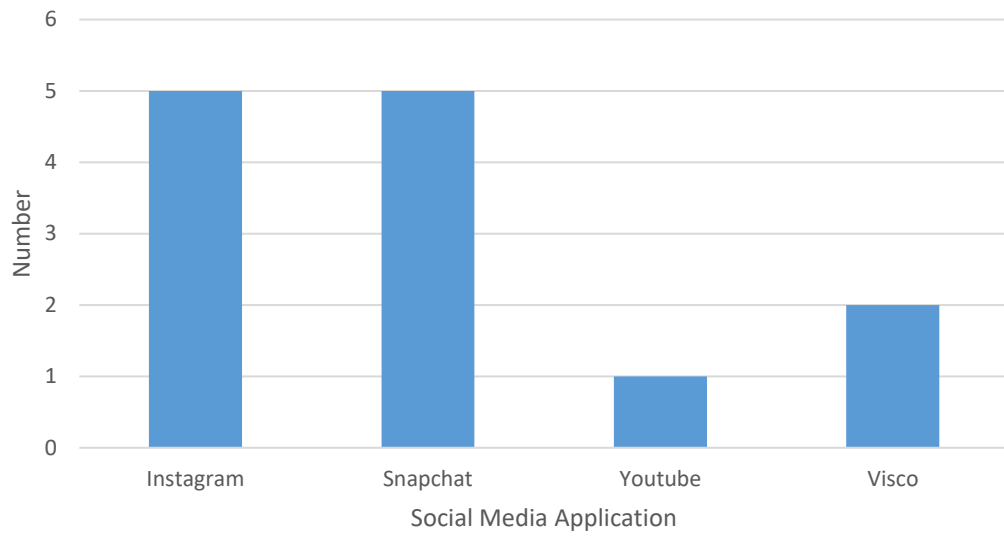
**Table 2***Number of Participants by Academic Year*

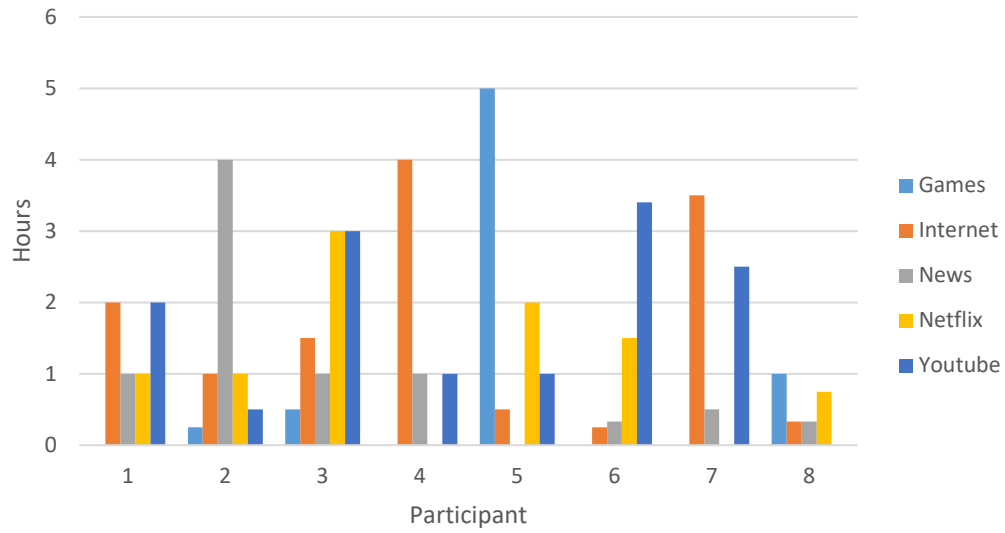
**Table 3***Race and Ethnicity*

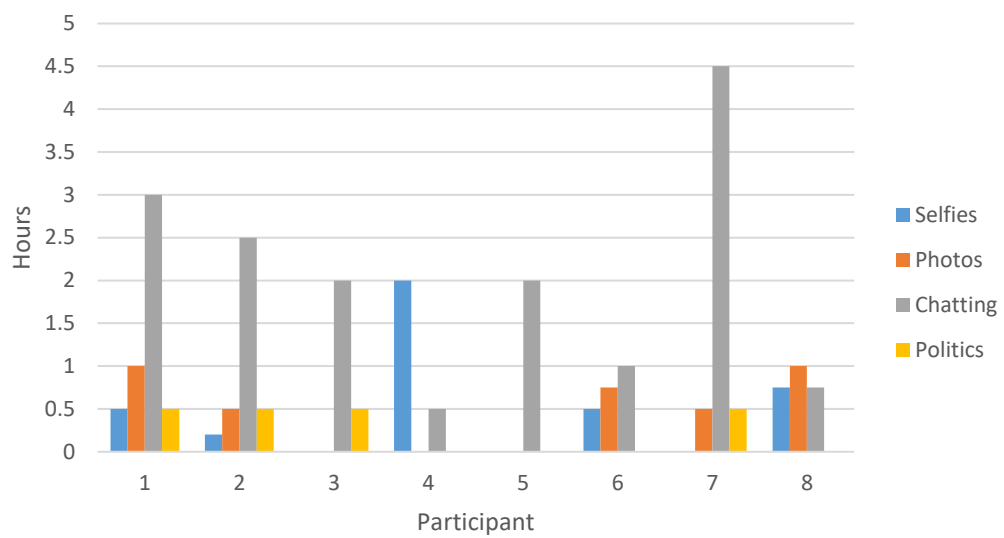
**Table 4**

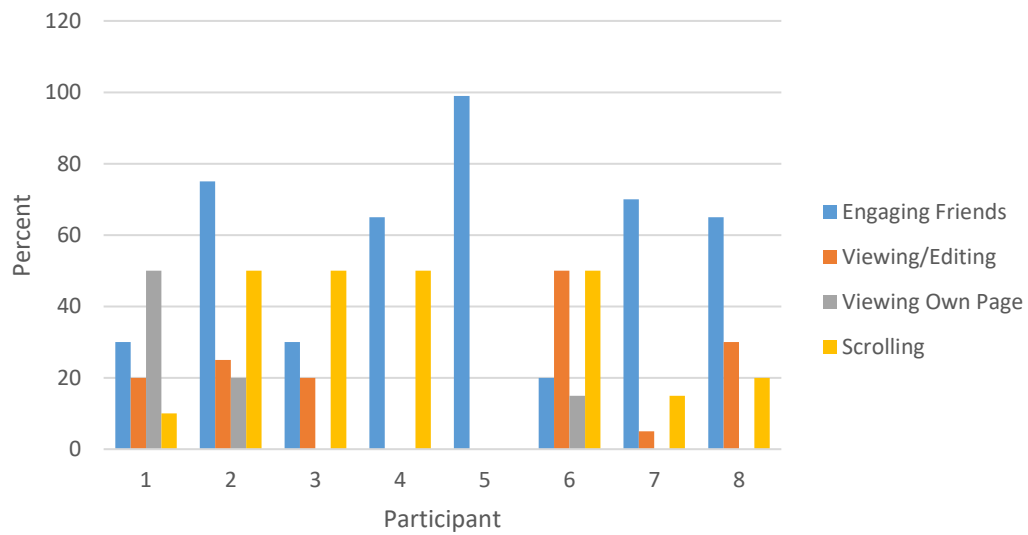
*Number of Hours Spent on Social Media*



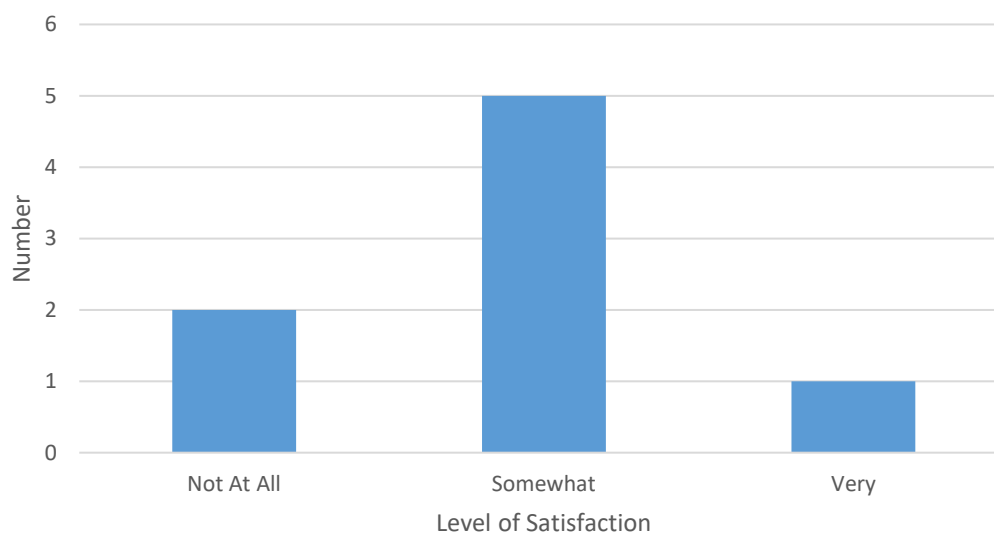
**Table 5***Favorite Social Media Application*

**Table 6***Time Spent Per Application*

**Table 6 Continued***Time Spent Per Application*

**Table 7***Percentage of Time Spent*



**Table 8***Social Media Satisfaction Levels*

**Table 9***Clusters and Themes*

<b><u>Cluster</u></b>	<b><u>Theme One</u></b>	<b><u>Theme Two</u></b>	<b><u>Theme Three</u></b>	<b><u>Theme Four</u></b>
<b>Relationship Advantages and Disadvantages</b>	Promoting Social Connection	Hindering Social Connection	Promoting Mutual Understanding and Learning	
<b>Navigating Social Interactions</b>	Interpersonal Conflict Online versus In-Person	Preference of Face-to-Face Communication	Emotional Responding, Nonverbal Communication, and Honesty	Empathic Understanding and Social Media
<b>Impact of Social Media on Emotional Functioning and Social Acceptance</b>	Body Image and Appearance Comparison	Intersection of Social Media and Mental Health	Importance of “likes” and Social Acceptance	

## Appendix A: E-mail Inquiry

Dear Professional Connection,

My name is Jen Schonberg and I am a doctoral student at Antioch University New England. I am writing with the hope that you will be willing to help me find participants to interview for my dissertation research. I am exploring how social media sites are affecting how high school girls develop empathy and how they problem solve in their friendships. I am writing to ask for your assistance recruiting 8 girls ranging in age from 14-18-years-old. The participants would need their parents' permission to participate and they would have to complete their own informed consent if they are under the age of 18.

There is very little risk involved in this study and it has gotten approval from Dr. Kevin Lyness, The Chair of Antioch University New England's Institutional Review Board. I will ask the girls to speak with me for around an hour at most—after school hours—by phone or video chat, and I will be careful to ensure they do not become unduly distressed if they choose to share examples of conflicts that continue to be upsetting for them.

I hope you will look at the attached recruitment flyer and agree to distribute it to potential participants and/or their parents. If you have questions, please do not hesitate to contact me. You can reach me by phone or email; my cell phone is XXX and my e-mail is XXX. Please do not hesitate to reach out to me at any point throughout this process. If the flyer is distributed, interested participants and parents would be able to contact me directly.

Thank you in advance for your help. If you would like me to send a summary of the findings once the study is completed, I would be delighted to share what I have learned with you.

Thanks again,  
Jen Schonberg

## **Appendix B: Recruitment Flyer**

### ***Social Media and Adolescent Friendships Study***

*Be part of an important and interesting research study!*

- *Are you between the ages of 14 and 18 years of age?*
- *Are you a full-time high school student or recently graduated from high school?*
- *Do you identify as female, regardless of your sex assigned at birth?*
- *Do you have a parent or guardian who would agree to your involvement in the project?*
- *Do you have about 45 minutes to spare?*
- *Would you like to receive a \$25 Gift Card from Amazon to thank you for your help?*

*If you answered YES to these questions, you may be able to participate in a research study about the effects of social media on high school friendships.*

*I believe you are the experts on your use of social networking sites. I will ask you about the ways your online engagement might help or hurt your friendships and your social life in school.*

*This study is being conducted by Jen Schonberg, a doctoral candidate in clinical psychology at Antioch University New England.*

*For more information and for a chance to be part of an exciting research opportunity, text or email Jen Schonberg at XXX.*

## **Appendix C: Informed Consent Form**

### **To Empathize or iEmpathize: Social Networking and Adolescent Female Friendships**

#### **INTRODUCTION**

My name is Jen Schonberg and I am a doctoral candidate in clinical psychology at Antioch University New England. Your daughter has been invited to take part in my dissertation research looking at the effects of social media on girls' friendships and the way they solve social problems. If your daughter is under the age of 18, the decision to let her participate is up to you.

In this research study, I am looking at how teenage girls use their smart phones or computers and how these devices could be affecting their friendships. I am particularly interested in learning about the ways girls communicate online and how this could be impacting how they make and maintain their friendships. In addition, I am curious about whether social media use is affecting how high school girls develop emotional understanding.

#### **WHAT IS INVOLVED IN THE STUDY?**

Once I have your consent, I will contact your daughter to set up an audio-recorded interview with me over either video-chat or phone. It will take less than an hour of her time, and we will arrange to speak at her convenience, so she does not miss school or any regularly scheduled activities. Sometime later, after I have completed the interviews, I will contact her by email with a transcript of her responses and any questions I still have. I will ask her for her feedback and any additional thoughts, so my report is as accurate and complete as I can make it.

Even if you both agree, your child can take a break or can stop participating in the study at any time. No one at school will know she has chosen to participate or what her responses are.

#### **RISKS of Participation**

Although the risks of participating are quite minimal, it is possible that she might feel distressed talking about a conflict with a friend that is still upsetting to her, especially if she thinks she has been treated poorly or if she shares information about an ongoing concern.

#### **BENEFITS to Participation**

It is reasonable to expect the following benefits from this research: discussing the effects of social media and friendship could aid in your child's emotional and psychological development. Your child could feel validated and supported that she is being asked her expert opinion on this subject. In addition, your child will receive a 25-dollar Amazon gift card for participating in the study. Also, others may benefit in the future from the information I find in this study.

#### **CONFIDENTIALITY**

Your child's name will not be used when data from this study are analyzed or published. Any quotes I include in the dissertation will not have identifying information in them. I will take every effort to keep research records, and any other personal information confidential. Steps will be taken to keep information about your child confidential. All interview answers will remain confidential. Numerical code names will be assigned to each participant. These codes will be used on all research notes, audio files, and documents. A password will be required to access the

interview data for added protection. Only I will have access to this password. Any handwritten notes or interview transcriptions will be kept in a locked file cabinet. This cabinet will stay in my personal possession. Audio files will be destroyed upon completion of this study. Direct quotes from the interviews will be used in the research and publication. However, quotes will be anonymous. The quotes will not include any information that might identify your child. In terms of sharing data, all communication will take place through my school email address, however these emails will be deleted once the study is complete and the data shared will not include any of your daughter's personal information.

### **INCENTIVES**

Your child will receive a 25-dollar Amazon gift card as compensation for participating in this study.

### **YOUR RIGHTS AS A RESEARCH PARTICIPANT?**

Participation in this study is voluntary. Your child has the right to not participate at all or to leave the study at any time.

If your child decides to leave the study at any point throughout the process, the procedure is: email or call me at XXX. No additional follow-up will be required.

### **CONTACTS FOR QUESTIONS OR PROBLEMS?**

Call or email Jen Schonberg at XXX if you have questions about the study, or any additional concerns. If you have any questions about your child's rights as a research participant, you may contact Dr. Kevin Lyness, Chair AUNE IRB at XXX.

### **Permission for a Child to Participate in Research (Electronic Version)**

As parent or legal guardian, I authorize \_\_\_\_\_ (child's name)

to become a participant in the research study described in this form.

Child's Date of Birth:

Parent or Legal Guardian Name (Please Print):

Parent or Legal Guardian's Signature:

Date:

*Upon signing, the parent or legal guardian will receive a copy of this form, and the original will be held in the subject's research record.*

## Appendix D: Adolescent Assent Form

Project Title: *To Empathize or iEmpathize: Social Networking and Adolescent Female Friendships*

Investigator: *Jen Schonberg*

I am doing a research study about social media and teenage friendships. I hope to learn more about your experiences with social media and how it affects your social life. If you decide that you want to be part of this study, you will be asked to participate in an individual interview with me at your convenience. I will ask you questions about social media and the positive and negative effects of using social networking sites to communicate with friends. The interview will not last longer than 60 minutes and can be done remotely on video-chat or the phone, whichever option is more comfortable for you. The interview will be audio-recorded so that I can listen to it after we are done and make a transcript of our conversation.

There are some more things about this study you should know. After we finish the interview process, I will contact you via e-mail a few months later. In the e-mail, I will send you the transcript of your interview and I may also ask you some additional questions about our interview, to make sure that I accurately represented your thoughts and feelings. You do not have to respond, but I will give you this opportunity to be sure I understand clearly what you were telling me.

There is just a small risk in participating in this study. You might feel uncomfortable talking about negative experiences with social media or recalling a conflict with friends. It's possible that you will feel upset or worried remembering what happened.

There are some benefits to taking part in this study. For example, I want to know what you think because I see you as more expert than adults are about social media. It could be useful and interesting to describe the ways in which social media plays a role in your life. It could be helpful to express things you like and dislike about social networking in general. You might like knowing that people who read the report will benefit from hearing what you have to say. You will also receive a \$25 Amazon gift card at the end of our interview to thank you for participating in this study.

When I am finished, I will write a report about what was learned. This report will not include your name or anything that reveals you in the study. If you would like a summary of what I learned after I finish the report, I can send that to you.

You do not have to be in this study if you do not want to. If you decide to stop after we begin, that's okay too. If you are under 18, your parents will also have to give their permission for you to talk to me.

If you decide you want to be in this study, please sign your name.

I, \_\_\_\_\_, want to be in this research study. I understand that taking part in this study could pose certain risks for me. I understand that I can choose to leave the study at any time.

\_\_\_\_\_  
(Sign your name here)

\_\_\_\_\_  
(Date)



## Appendix E: Semi-Structured Interview

### *Questions:*

How do SNS hinder and/or promote relationship formation and maintenance amongst teenage girls?

1. *In what ways do you maintain your friendships online? Give examples.*
2. *What do you do for fun? What sorts of things do you do when you hang out with friends in person?*
3. *On any given day, do you communicate with your friends more online or in person? What about on a weekday versus a weekend day?*
4. *Do you communicate with friends using group texts? Do you enjoy using this mode of communication?*
5. *How do you think communicating via group texts impacts your conversations, if at all?*

How do adolescent girls use SNS to navigate their social worlds?

1. *How does social media influence how you act around your friends? Has social media changed the ways in which you interact with friends? How?*
2. *Do you use social media to communicate with friends? How do you use social media to communicate? Do you enjoy FaceTiming and seeing someone face-to-face more, or do you prefer sending messages through various sites or posting to another person's profile?*
3. *Have there been changes to the various social networking sites throughout your lifetime, and, if so, what are these changes? Has the way you use SNS changed from when you first began?*
4. *What do you discuss with friends on social media?*
5. *In what ways are SNS important or not important in your life?*
6. *What would your life be like if even more of your relationships were online? What would be good about that for you? What would be hard? What would your life be like with less or without social media?*
7. *Have you ever posted something or made a comment on a social networking site that you felt was hurtful to another person and regretted it later?*
8. *Has using SNS changed, for better or worse, your body image; that is how you feel about your physical appearance?*
9. *Have you ever posted anything on an SNS that some might consider inappropriate?*
10. *Have you ever regretted posting something that others may deem inappropriate?*
11. *Have you ever deleted something off social media? Why or why not and how did it feel?*
12. *Do you consider whether or not you will get feedback or "likes" on a post if you decide to post something on a social media site? Why or why not?*

How do SNS impact how adolescent girls address conflict in their friendships?

1. *How has using social media impacted that way you approach difficult topics with your friends?*
2. *Describe a recent conflict you had with a friend in person. Now, describe a recent conflict you had with a friend on a SNS. What did that look like? What was different about the two scenarios?*
3. *Do you prefer to address difficult situations that occur with friends online or in person? What is different or the same about addressing something difficult that occurred between you and a friend or group of friends?*
4. *Do you think it's easier to ignore someone online versus in person? Do you know what "ghosting is" and have you or a friend ever experienced this phenomenon online? How did it feel and how did you handle it?*

How do SNS affect adolescent girls' empathic understanding and responding?

1. *Tell me about a time when social media made you feel closer to a friend. What about more distant?*
2. *Has social media changed the way you view yourself or others?*
3. *How does using SNS impact how honest you are with your friends about your feelings?*
4. *What would you change about your involvement in social media if you could change anything at all? What would you keep the same about your involvement with social media?*
5. *Do you react differently, i.e. emotionally when you are arguing with a friend in person versus online?*
6. *Are there things you post online that you cannot say in person? What kinds of things would you feel more comfortable talking about online than in person? In person than online?*
7. *What do you think a concerned adult or parent would say if they were able to scroll through your social media pages and see what you post online? Would you share some of these concerns?*
8. *When you go off-line after being on an SNS, is your mood usually more up or more down?*
9. *Do other peoples' responses to your posts usually make you feel better or worse?*
10. *Do you often try to provide support or encouragement when a friend or acquaintance is feeling down or is struggling or confused?*
11. *Do you feel that others often provide you encouragement and support when you communicate on SNS that you were feeling down, are struggling, or confused?*

### Appendix F: Demographic Data Form

*What is your age?*

*What is your grade in school?* 9 10 11 12 or Recently Graduated

*What is your race?* White/Caucasian Black or African American Asian Native Hawaiian  
or Other Pacific Islander Hispanic Latino Alaskan Native American Indian

*On average, how many hours per day and night do you spend on social media?*

*What sites do you spend the most time on? (Circle all that apply)*

- A. Facebook*
- B. Snapchat*
- C. Instagram*
- D. YouTube*
- E. Slack*
- F. Reddit*
- G. iMessage / Facetime / Phone*
- H. LinkedIn*
- I. Tumblr / Pinterest*
- J. Others: (please list)*

*On average, how many hours per day (or night) do you spend doing the following:*

- 1. Playing games:*
- 2. Searching Google or other browsers for information:*
- 3. Reading online news or other articles:*
- 4. Watching TV/Netflix*
- 5. YouTube-ing:*

6. *Creating and sending selfies:*
7. *Posting photos or editing snapchats or Instagram page:*
8. *Participating via social media in social activities:*
9. *Participating via social media in political activities or activism:*

*Out of all your time online, what percent out of 100% is spent engaging with friends in a conversation? Posting to another person's page? Viewing or editing your own page? Scrolling through newsfeeds?*

*How satisfied are you with the amount of time you spend on social media? (Circle one)*

1. *Very satisfied*
2. *Somewhat satisfied*
3. *Not at all satisfied*

*In the past 3 months, how much of your time on social media has been enjoyable?*

*Do you want to increase or decrease your social media use?*