ORIGINAL ARTICLE

Impact of Social Media Usage on Perception of Relationships and Mental Health Among Adolescents

SALBIA ABBAS[1], FATIMA SHERAZ[2], NIMRA MUDASSAR[3], NAYAB CHEEMA[4]
[1]Associate Lecturer, Department of Psychology, Govt. College women university Sialkot
[2,3,4]Student, Department of Psychology, Govt. College women university Sialkot
Correspondence to: Salbia Abbas, Email: salbia.abbas@gcwus.edu.pk

ABSTRACT

Background: Adolescence represents a critical developmental stage where social interactions significantly impact well-being. The widespread adoption of social media platforms has fundamentally transformed how individuals communicate, interact, and perceive their environments.

Purpose: Recent research seeks to clarify how social media affects adolescents' perceptions of relationships and mental health.

Method: A purposive sampling method was used to involve 300 adolescents of both genders from urban and rural areas in this cross-sectional study. Data collection utilized a self-designed demographic questionnaire and standardized assessments, including the SMUS (Social Media Use Scale) developed by Tuck and Thompson (2023), PHQ-9 (Patient Health Questionnaire-9) by Robert and W.H. (1991), and ARQ (Adult Relationship Questionnaire) by Scharf (1994). Both descriptive and inferential statistics were applied.

Findings: The findings revealed a statistically significant negative correlation between social media use and mental health ($r = -0.163$, $p < 0.01$), as well as perception of relationships ($r = -0.196$, $p < 0.01$), suggesting that increased social media use is associated with poorer mental health and diminished relationship perceptions. Linear regression analysis demonstrated that social media use significantly predicts lower mental health ($B = -0.067$, $p < 0.05$) and poorer perception of relationships ($B = -0.093$, $p < 0.05$). Notably, excessive social media use emerged as a stronger predictor for decreased perception of relationships compared to mental health, indicated by the higher Beta "B" value for relationship perception.

Conclusion: In conclusion, the study underscores the detrimental impact of excessive social media use on adolescents' mental health and relationship perceptions. Current research will be useful to integrating media literacy into educational curricula, launching public health campaigns, and equipping mental health professionals to effectively address issues related to social media use.

Keywords: Social Media, Perception of Relationships, Mental Health, Adolescence, Sialkot

INTRODUCTION

The influence of social media on adolescents has become a prominent and complex aspect of modern society. Over the last decade, the rapid growth and widespread adoption of various social media platforms have fundamentally changed how teenagers interact, communicate, and perceive their world [1]. While social media has enhanced connectivity among peers, allowing for the maintenance of friendships and the sharing of experiences in unprecedented ways, it also brings significant negative implications. Social media significantly impacts romantic relationships, influencing how individuals navigate and express their romantic connections, including through virtual dating and affecting relationship dynamic [2]. Positive relationships formed via social media can offer crucial emotional support, boost self-esteem, and foster effective communication [3]. However, these platforms also expose adolescents to social comparisons that may lead to reduced self-esteem and heightened stress levels [4] Moreover, cyberbullying on social media can have severe effects on mental health, contributing to anxiety, depression, and feelings of powerlessness [5].

Social Media &Mental Health: The impact of social media on psychological well-being is multifaceted. Social media platforms inundate users with endless streams of curated content, which can distort expectations in relationships and heighten social comparisons, potentially fostering feelings of inadequacy [6]. The pervasive nature of these platforms, offering constant connectivity, has been linked to heightened levels of fear, despair, and diminished self-esteem among teenagers, disrupting their mental health as they navigate the intricate network of social media connections [7].

Social Media Consumption in Adolescence: Social media consumption involves adults' interactions across various platforms, encompassing time spent, frequency of usage, types of content accessed, and levels of engagement [8]. Examining how different social media platforms influence adolescents' views on relationships and mental health is essential. Elements such as engagement with dating apps, exposure to relationship-centric content, and communication behaviors on these platforms collectively shape teenagers' perceptions and overall well-being.

Perception of Relationship among Adolescents: In the digital era, social media platforms have become central to adults' daily routines, raising concerns about their impact on perceptions of relationships. Social media plays a significant role in modern life, featuring idealized depictions of relationships that shape teenagers' expectations and perceptions of friendship dynamics [9]. This aspect explores the interaction between adults and social media, focusing on how peer interactions and curated content on these platforms influence teenagers' attitudes, beliefs, and understanding of relationships

Mental Health of Adolescents: The mental health of teenagers, influenced by their social media usage, is shaped by their online activities and their impact on psychological well-being. Adolescents who engage excessively on social media or encounter negative online experiences may experience heightened feelings of hopelessness, inadequacy, and anxiety [7].

Relationship between Social Media Consumption and Perception of Relations among Adolescents: The relationship between social media use and perceptions of various relationships such as those with parents, siblings, classmates, and friends is a multifaceted aspect of daily human interactions. Social media platforms increasingly shape how individuals connect, communicate, and share experiences within their diverse social circles [10]. The intersection of virtual and real-world relationships is influenced by factors such as the selective nature of online information, pressures to conform to societal norms, and the impact of social media on self-perception [3]. Understanding these complex dynamics is crucial in navigating modern social interactions, particularly as individuals continue to navigate their experiences in the digital realm.

Parents Relationship: Parents often grapple with concerns regarding their children's use of social media, ranging from worries about privacy to apprehensions about its effects on mental health. How parents perceive their children's online activities can influence the parent-child relationship, potentially leading to disagreements

or strained communication[11]. Moreover, differences in familiarity with social media platforms between generations can create challenges in communication between parents and their children, impacting the overall dynamics of their relationship.

Siblings Relationship: Social media also affects sibling relationships by providing a new avenue for bonding and communication. Siblings often feel more connected through shared experiences, captioned photos, and online chats, especially when they live apart. However, managing the challenges of online communication can lead to miscommunication and disagreements, similar to traditional relationships. Conflicts in digital interactions between siblings can influence how individuals perceive the harmony and strength of their sibling relationships [12].

Relationship with Peers: Beyond familial connections, social media significantly shapes individuals' perceptions of their relationships with peers. Platforms like Snapchat, Twitter, and TikTok facilitate instant communication and real-time updates, fostering dynamic peer interactions. Digital media enhances friendships by enabling people to maintain connections despite geographical distances, promoting a sense of community and camaraderie among peers. However, widespread use of social media in peer interactions carries drawbacks. The pressure to maintain a favorable online persona, conform to social norms, and seek social validation can influence how individuals present themselves and perceive their status within their peer group. Continuous exposure to peers' achievements and activities on social media can exacerbate feelings of missing out[3], potentially impacting self-esteem and overall satisfaction with peer relationships. The reactive nature of social media may create a disparity between users' online and offline identities, shaping perceptions of the authenticity of peer relationships.

Intimate Relationships: Social media plays a crucial role in shaping people's perceptions of romantic relationships. Dating apps, social media platforms, and relationship status updates heavily influence how individuals view their romantic partnerships. The digital realm offers opportunities for online dating, communication, and sharing relationship milestones. However, the selective portrayal of romantic experiences online can lead to exaggerated perceptions of romance and love. This selective presentation may contribute to relationship dissatisfaction and tension when individuals compare their own relationships to seemingly flawless ones depicted on social media[9].

Society and Community Relationship: Social media influences relationships beyond close friends and family to encompass broader social networks and community ties. However, individuals' perceptions of the diversity and inclusivity of their social connections may be shaped by the platform's environment and the reinforcement of specific viewpoints[10]. Platforms such as LinkedIn and Twitter enable users to engage with various communities, share professional achievements, and expand their social networks. he relationship between social media use and perceptions of different relationships is complex and extensive. Social media presents both opportunities and challenges that impact how individuals perceive and navigate their interpersonal connections, spanning from family dynamics to peer interactions, friendships, and romantic relationships.

Mental health has a confusing and multifaceted relationship among adolescents. These platforms provide chances for interaction and self-expression. But they also provide risks that may have an adverse effect on a number of mental health issues.

Fomo (Fear of missing out): In the digital age, adolescents may experience fear of missing out (FOMO) as a result of constant exposure to social events and experiences posted on social media[3]. This fear can lead to anxiety, stress, and a sense of disconnection, affecting their mental well-being. Similarly, teenagers navigate a dilemma in balancing their desire to stay connected through digital technology with their apprehension of experiencing FOMO.

Self Esteem: Adolescents often utilize social media for social comparison, impacting their self-esteem. Continuous exposure to

curated images and lifestyles can foster unrealistic expectations, leading to feelings of inferiority and diminished self-esteem[13]. This culture of comparison has the potential to negatively influence young people's self-perception and mental health.

Social Comparison: Social media often perpetuates unrealistic ideals of perfection, influencing youth perceptions of their bodies. Images promoting specific body types can contribute to feelings of dissatisfaction and discontent with one's own body[5]. This phenomenon may encourage unhealthy behaviors such as extreme dieting or excessive exercise. Concerns regarding body image are closely linked to mental health, potentially exacerbating issues like anxiety and eating disorders.

Isolation and Separation: Interestingly, excessive use of social media can paradoxically exacerbate feelings of separation and isolation, despite its aim to enhance connectivity. Increased screen time may lead to reduced face-to-face interactions, potentially hindering the development of essential social skills[7]. Such circumstances can contribute to the onset of conditions like social anxiety disorder and depression, highlighting the negative impact of isolation on mental health[12].

Literature Review: Social media exerts a profound influence on adolescents' perceptions of relationships and mental health, prompting extensive research into its implications. Platforms like Instagram, Facebook, and Snapchat are central to how today's youth navigate interpersonal dynamics, often setting unrealistic standards through curated content, which has been linked to heightened anxiety and depression[14]. While some argue for the positive social interactions facilitated by social media, others emphasize the need for digital literacy to mitigate potential negative effects[12] highlighted that adults' addiction to social media has become integral to daily life, impacting their mental health. This addiction can lead to increased concerns about self-perception and self-esteem, exacerbated by constant online comparisons[9]. Adolescents, influenced by idealized portrayals of romantic relationships on platforms like Facebook and Snapchat, often encounter conflicts between digital fantasies and real-life dynamics[4]. Furthermore, studies underscore the adverse impact of social media on adolescents' mental well-being, including disruptions to sleep patterns and the exacerbation of loneliness[10]. For instance, research revealed that social media users, particularly on platforms emphasizing appearance, are more susceptible to body image issues and associated mental health challenges, especially among females[7].

Moreover, the influence extends beyond personal relationships to include societal perceptions, with implications for appearance anxiety and emotional eating behaviors among adolescents[15]found a significant correlation between social media addiction and feelings of loneliness among high school students in Ankara, underscoring the need for balanced digital engagement. In conclusion, while acknowledging the benefits of social media, particularly in fostering connectivity, it is crucial for parents and educators to monitor and guide adolescents in responsible usage. By promoting digital literacy and setting healthy boundaries, stakeholders can help mitigate the negative impact of social media on teenagers' mental health and well-being. Future research should continue to explore these complexities to develop effective intervention strategies.

THEORETICAL FRAMEWORK

Social Comparison Theory: Social media profoundly influences teenagers' perceptions of relationships and self-esteem by promoting unrealistic standards and fostering constant social comparison[3]. This comparison, driven by idealized online personas, can lead to identity confusion and lower self-esteem among adolescents, impacting their mental well-being. The pervasive nature of social media exacerbates these challenges, making youth more susceptible to anxiety and self-doubt as they navigate their identities in a digitally interconnected world.

Filter Bubble Theory: Social media has transformed how individuals interact, often replacing face-to-face communication with online interactions, thereby contributing to feelings of isolation

and loneliness among teenagers[10]. coined the term "filter bubble" to describe how social media algorithms personalize content based on users' past interactions, limiting exposure to diverse perspectives. This phenomenon confines youth within their comfort zones, hindering their exploration of new ideas and viewpoints. As a result, young people may prefer digital interactions over physical meetings, further isolating themselves and narrowing their social experiences[8].

Cognitive Behavioral Therapy: Cognitive Behavioral Theory (CBT) underscores that our thoughts shape our feelings and behaviors in response to our surroundings. Social media exacerbates feelings of inferiority and promotes social comparison among youth, distorting their perception of reality based on online personas. As an integral part of modern life, particularly for teenagers, excessive engagement with social media adversely affects their well-being, making them susceptible to feelings of inferiority, isolation, and loneliness. Parental guidance is crucial in mitigating these harmful effects. CBT offers strategies to help youth challenge negative and distorted thoughts, encouraging them to focus on the positive aspects of life and resolve identity crises[7]. By emphasizing self-acceptance and valuing their own abilities and opinions, teenagers can resist conforming to idealized standards perpetuated in the digital world. It's essential for adults to recognize the deceptive nature of online personas and strike a balance between digital and physical realities to safeguard teenagers' mental health.

Bio psychosocial Model: According to the Bio-Psychosocial model, an individual's personality is influenced by a combination of biological, psychological, and social factors[3]. Social media significantly influences adolescents' perceptions of relationships, impacting all three factors. Mental health, as a biological factor, is affected by social media use among adults, which is a social factor. Adolescents' perception of relationships is a psychological factor influenced by social media. These factors collectively impact teenagers' mental health, exacerbating issues such as identity crises and altering brain chemistry. Understanding these interconnected elements through the Bio-Psychosocial model is crucial for comprehending the effects of social media on youth in the digital era.

METHODOLOGY
Research Design: The present study employed a quantitative research approach within a cross-sectional research design

Sampling: A sample of 300 participants was selected using purposive sampling techniques. Both male and female participants were included, recruited from both rural and urban areas within the specific district of Sialkot, Pakistan

Data Collection: Data collection involved the application of standardized tools in addition to a self-developed demographic questionnaire.

MEASURES
Social Media Usage Scale (SMUS): Tuck and Thompson (2023) developed the Social Media Usage Scale, comprising 22 items that assess the individual social media behavior across different dimensions. Participants respond to 5- point Likert scale ranging from 1 to 5 (1=Always, 2=Often,3=Sometimes,4=Rarely,5=Never) that captures their attitudes, motivations and patterns of social media use. The Cronbach's α coefficient for Social media usage scale is 0.86.

Patient Health Questionnaire (PHQ-9): Robert Spitzer, Janet B.W and Kurt Kroenke (1991) developed PHQ-9 Patient Health Questionnaire. It was nine items depression scale used to assess presence and severity of depressive symptoms based on DSM-5 criteria. Participants respond to 3-point Likert scale ranging from 0 to 3(0 for Not at all,1 for Several days, 2 for more than half of the days,3 for Nearly every day) covering aspects such as interest, pleasure, mood, sleep, energy, appetite and self-thoughts. The Cronbach's α coefficient for PHQ-9 is 0.839.The total score reflects the level of depression with higher scores indicating severity.

Adolescent Relationship Questionnaire (ARQ): Scharfe (1994) developed the ARQ Adolescents Relationship Questionnaire. It comprise of 17 items, specifically design for adolescents. Likert scale involves 3-point ranging from 1 to 3 (1=Not at all like me, 2= Kind of like me, 3= Very like me) assess various aspects of adolescents relationship including attachment patterns, emotional closeness and interpersonal dynamics. Cronbach's α coefficient for ARQ is 0.88.To obtain a total score, researcher sum the rating of all items, in which higher score indicate a greater alignment with specific relationship characteristics.

Procedure: The findings focused on our primary variables: social media use, perception of relationships, and mental health. Before commencing data collection, we obtained permissions from the authors of the scales via email. Approval was also obtained from institutions such as the University of Sialkot and the University of Management and Technology for conducting the study. Both verbal and written informed consent procedures were administered to participants. Detailed instructions were provided to participants for responding to the questionnaire, ensuring ethical considerations were adhered to. The collected data were analyzed using SPSS for further examination.

Ethical Considerations: Ethical considerations were strictly followed. Participants were briefed about the research. Both verbal and written inform consent was obtained. Confidentiality of the participants was maintained throughout the research. Participants received a summary of the study purpose and how their data was going to utilize in research. Data of participants stored securely. Rights of participants were respected and the study was culturally sensitive and transparent.

RESULTS
Descriptive: The bar chart illustrate the distribution of various demographic information percentage obtained.
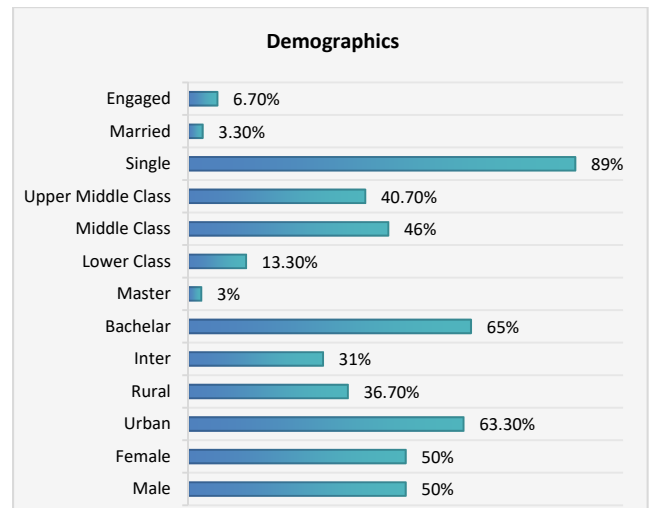

Figure 1: Correlation Analysis

Table 1: Pearson correlation analysis for Social media use predicting mental health and perception of relationship

Variables	N	M	SD	1	2	3
Social media use	300	59.30	12.04	1	-1.63	-1.96
Mental health	300	10.06	5	-1.63	1	.303
Perception of relationships	300	33	5.8	-1.96	.303	1

**. Correlation is significant at the 0.01 level (2-tailed)

Table 1 shows Pearson correlation analysis was conducted to predict mental health and perception of relationships based on the sample's social media use. Pearson product correlation of social media use (M=59.30, SD=12.04) and mental health

(M=10.06, SD=5) was found to be moderately negatively and statistically significant (r=.163, P<0.01).H2 was supported. This shows that increase in social media use would lead to lower mental health. Pearson product correlation of social media use (M=59.30, SD=12.04) and perception of relationships (M=33, SD=5.8) was found to be moderately negatively and statistically significant. (r=.196, P<0.01).H2 was supported. This indicates that increase in social media use would lead to decrease in perception of relationships

Linear Regression Analysis

Table 2: Linear Regression Analysis for Social Media use predicting mental health

Measures		B	SE	B	t	P
	Constant	14.012	1.413		9.914	.000
	Social Media use	-.067	.023	-.163	-2.853	.005

Note.*Significance at 0.05,N=300

Table 2 shows a linear regression analysis was conducted to predict mental health based on samples social media use. A statistically significant linear regression was found F=8.140, p<0.05 with an R^2 of .027 in our sample. Results indicated that adults with higher use of social media will have lower mental health

Table 3: Linear Regression Analysis For Social Media use predicting perception of relationships

Measures		B	SE	B	t	P
	Constant	38.488	1.635		23.544	.000
	Social Media use	-.093	.027	-.196	-3.459	.001

Note.*Significance at 0.05,N=300

Table 3 shows a linear regression analysis was conducted to predict perception   of relationship based on samples social media use. A statistically significant linear regression was found (12) =11.963, p<0.05 with an R^2 of .039 in our sample. Results indicate that adults with higher social media use will have lower perception of relationships. Comparing the values of B for mental health (B=.163) and for perception of relationships (B=.196), higher social media use is a strong predictor for lower perception of relationships than lower mental health among adults.

DISCUSSION

The hypothesis of this study delves into the complex dynamics surrounding social media, mental health, and perception. Numerous studies have illuminated the relationship between social media usage, perception of relationships, and mental health, suggesting that excessive use of social media can have negative impacts on both fronts. Research on online activities and mental health has consistently shown a negative association between social media usage and decreased life satisfaction, increased symptoms of depression and anxiety, and altered perceptions of relationships [16]. The current study aims to investigate whether social media use indeed has a negative impact on mental health[15.] studied comparisons among adolescents due to social media usage, concluding that social media profiles can lead to severe comparisons among individuals and disrupt face-to-face interactions. Similarly, consistent with previous findings, individuals who spend more time on social media tend to report feelings of loneliness, isolation, and decreased self-esteem[4], underscoring the impact of social media across various dimensions without considering individual differences. The pioneering work has shown that social media use can lead to unrealistic comparisons and expectations because individuals are exposed to idealized and manipulated content that distorts their perception of reality[6]. This not only affects self-perception but also influences how individuals perceive others around them. Moreover, individual differences exist in social media usage patterns, frequency, and purpose. Research indicates that individuals who use social media primarily for comparison purposes experience more negative consequences than those who use it for social support [17]. This current research

aligns with these findings, affirming that excessive use of social media can lead to poor mental health and distorted perceptions of relationships. Increased engagement in online activities is associated with disruptions in mental health. This study supports the hypothesis that different patterns and purposes of social media use impact our perceptions of relationships and mental health.

CONCLUSION

This insightful study underscores a significant correlation, emphasizing the profound impact of social media on both adolescents' perception of relationships and their mental health. Social media profoundly shapes adolescents' views on relationships and influences their understanding of what constitutes normal behavior within them[18]. Platforms such as Instagram, Snapchat, TikTok, and Facebook often portray relationships in an idealized manner, showcasing specific ideals of pleasure, success, and beauty. This can mislead adolescents about realistic expectations and understanding of relationships in the real world. Furthermore, the dynamics of social media interactions can influence adolescents' perceptions of self-worth, potentially leading to anxiety, depression, or feelings of dissatisfaction. The current research decisively illustrates that increased social media usage is associated with decreased perception of relationships and deteriorating mental health.[19]

Implications: The findings concerning the influence of social media on adolescents' perceptions of relationships and its subsequent impact on mental health have significant implications across multiple domains such as education, policy, mental health practice, and technology development. These implications underscore the necessity for a multifaceted approach to mitigate negative effects while harnessing potential benefits.

Public health campaigns should be launched to raise awareness about the potential risks associated with social media use and promote healthy online behaviors. In mental health practice, there is a crucial role in training professionals to recognize and address issues stemming from social media use, including its effects on self-esteem, anxiety, depression, and interpersonal relationships. Furthermore, the study paves the way for future research endeavors, advocating for a deeper exploration of the intricate factors that influence adolescents' perceptions of relationships and mental health. By delving into these complexities, we can develop more targeted interventions and strategies to help adolescents navigate the digital landscape in a positive manner. Ultimately, the goal is to leverage our understanding of these nuances to foster a healthier online environment for everyone.

Recommendations: The study's findings introduce new avenues for exploration, aiming to enhance our understanding of the connections between social media, perception of relationships, and mental health. Investigating the essential mediating factors among these variables could unveil the intricate mechanisms governing their interaction, shedding light on how social media influences perception of relationships and mental health. Strategies to mitigate the impact include limiting social media usage to reduce exposure to potentially harmful content. Providing resources and workshops on mental health awareness and coping strategies can empower individuals. Mental health professionals should develop and evaluate intervention strategies tailored to educate clients about the effects of social media on mental health and relationships, promoting healthy social media use. By implementing these comprehensive and collaborative measures, we can minimize the adverse effects of social media on adolescents' perceptions of relationships and their mental health. This approach aims to foster a healthier and more informed approach to engaging online.

REFERENCES

1. Brown, J. D., & Bobkowski, P. S. (2011). Older and newer media: Patterns of use and effects on adolescents' health and well-being. In R. Lerner & L. Steinberg (Eds.), Handbook of Adolescent Psychology,

Volume 2: Contextual Influences on Adolescent Development (3rd ed., pp. 573-601). John Wiley & Sons.

2. Fox, J., & Warber, K. M. (2014). Social networking sites in romantic relationships: Attachment, uncertainty, and partner surveillance on Facebook. Cyberpsychology, Behavior, and Social Networking, 17(1), 3-7. doi:10.1089/cyber.2012.0660

3. Valkenburg, P. M., & Peter, J. (2009). Social consequences of the Internet for adolescents: A decade of research. Current Directions in Psychological Science, 18(1), 1-5. doi:10.1111/j.1467-8721.2009.01628.x

4. . Nesi, J. 2020. The Impact of Social Media on Youth Mental Health: Challenges and Opportunities. North Carolina Medical Journal. vol. 81, no. 2, pp. 116–121. doi: 10.18043/ncm.81.2.116.

5. walski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. Psychological Bulletin, 140(4), 1073-1137. doi:10.1037/a0035618

6. .Tiggemann, M., & Slater, A. (2014). NetGirls: The Internet, Facebook, and body image concern in adolescent girls. International Journal of Eating Disorders, 47(6), 630-644. doi:10.1002/eat.22357

7. imack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. Y., Rosen, D., ... Miller, E. (2017). Social media use and perceived social isolation among young adults in the U.S. American Journal of Preventive Medicine, 53(1), 1-8. doi:10.1016/j.amepre.2017.01.010

8. Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. Personality and Individual Differences, 86, 249-256. doi:10.1016/j.paid.2015.06.026

9. Rosen, L. D., Whaling, K., Rab, S., Carrier, L. M., & Cheever, N. A. (2014). Is Facebook creating "iDisorders"? The link between clinical symptoms of psychiatric disorders and technology use, attitudes and anxiety. Computers in Human Behavior, 32, 251-256. doi:10.1016/j.chb.2013.11.013

10. Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. Journal of Computer-Mediated Communication, 12(4), 1143-1168. doi:10.1111/j.1083-6101.2007.00367.x

11. Moreno, M. A., Jelenchick, L. A., Egan, K. G., Cox, E., Young, H., Gannon, K. E., & Becker, T. (2011). Feeling bad on Facebook: Depression disclosures by college students on a social networking site. Depression and Anxiety, 28(6), 447 455. https://doi.org/10.1002/da.20805

12. .Horgan, A., & Sweeney, J. (2020). Young adolescents' use of social media and its relationship with depression and mental well-being. Journal of youth studies, 23(3), 322-337.

13. Frison, E., & Eggermont, S. (2016). Browsing, posting, and liking on Instagram: The reciprocal relationships between different types of Instagram use and adolescents' depressed mood. Cyberpsychology, Behavior, and Social Networking, 19(6), 336-342. https://doi.org/10.1089/cyber.2016.0062

14. Brown, B. B., & Larson, J. (2009). Adolescents' relationships with peers. In R. M. Lerner & L. Steinberg (Eds.), Handbook of adolescent psychology (3rd ed., Vol. 2, pp. 74–103). Hoboken, NJ: Wiley & Sons.

15. Diener E., Emmons R.A., Larsen R.J., Griffin S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49, 71–75.

16. Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., … & Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. PloS One, 8(8), e69841. https://www.Mentalhealth.Org.Uk/a-toz/a/anxiety

17. Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. Preventive medicine reports, 12,

18. Livingstone, S. (2009). Children and Youth on the Internet: The Struggle for Identity. Polity Press. (This book explores social media's role in shaping adolescent identity, including relationship norms)

19. Valkenburg, P. M., & Peter, J. (2007). Online communication and adolescent well-being: Testing the stimulation versus the displacement hypothesis. Journal of Computer-Mediated Communication, 12(4), 1169-1182. doi:10.1111/j.1083-6101.2007.00368.x

----