

Adolescents and Social Media Use: Gender and Impact

Bryan Dang

Department of Social Work

ABSTRACT

Youth mental health and developmental trajectory are often priority concerns in various domains of education, research, policy, and public discourse. Social media’s effects on adolescent wellbeing have long been debated. This study investigated whether heavy teenage users of social media exhibited lower scores of wellbeing compared to teenagers who seldomly visited social networking sites. The current study also sought to explore whether there was a differential effect based on gender on psychological and social wellbeing after social media usage. This study was a secondary analysis of data from Social Media, Social Life: How American Teens View Their Digital Lives, United States, 2012 by Common Sense Media. With a nationally representative, probability-based sample of 1,030 13- to 17-year-olds, the study provides cross-sectional and quantitative descriptive statistics to explore the associations between variables. Results from multiple Chi-square tests indicated that psychological and social wellbeing were not affected by frequency of visits to social networking sites. Gender moderated negative and positive perceptions after social media use. The study identifies the implications for social work practice regarding social media’s integration.

INTRODUCTION

Significance of the Study

- Decreases in adolescent psychological wellbeing coincided with the rise of smartphone technology since 2012 (Leventhal et al., 2021; Twenge et al., 2018).
- 45% of 13- to 17-year-olds are almost always online and 97% use a social media platform with 95% of teens having access to a smartphone (Anderson & Jiang, 2018).

Purpose of Research

- The study aims to provide further nuance to the literature of social media use among adolescents while considering the effect of gender.

Research Question

- What is the relationship between social media usage and the social and psychological wellbeing of adolescents?
- How do the differences in social media use between males and females affect their social and psychological wellbeing?
- How does gender affect the type of online perceptions, behavior and experiences the respondent engages in?

Hypothesis

- There is a negative relationship between prolonged social media use and social and psychological wellbeing among adolescent youth.
- There is a more significant detrimental effect on social and psychological wellbeing from social media use among females compared to males.
- That female adolescents are more likely to report negative feelings and experiences from social media usage.

LITERATURE REVIEW

- Previous research has yielded mixed results.
- Teens who spent more time on digital media (e.g., texting, the Internet, gaming, social media) and less on nonscreen activities (e.g., relationships, physical activities, schoolwork) were more unhappy (Twenge et al., 2018).
- Adolescents who used digital and social media more heavily (i.e., more than 5 hours per day) had more than double the rate of depressive symptom scores compared to non-users or light users (i.e., 1-3 hours per day) with the relationship being stronger for females (Kelly et al., 2019; Twenge & Campbell, 2019).
- Kardefelt-Winther (2017) found little support for negative wellbeing by digital technology usage, but instead the research reviewed indicates benefits for children’s social relationships with little data to suggest risk of addiction.
- An eight-year longitudinal study on adolescents who completed once-yearly questionnaires between age 13 and 20 found no relationship between time spent using social media and depression or anxiety, no relationship even when transitioning from adolescence to early adulthood, and no significant variance between boys or girls (Coyne et al., 2020).
- Technology-based upward social comparisons and feedback seeking indicated higher likelihoods of depressive symptoms, especially among females and unpopular adolescents (Nesi & Prinstein, 2015).
- Individuals who engaged in upward social comparisons, avoided posting group photos of themselves, and felt bothered by being tagged in unflattering photos reported more depressive symptoms (Robinson et al., 2019).

METHODOLOGY

Research Design

- The current study is a secondary analysis of the data from Social Media, Social Life: How American Teens View Their Digital Lives, United States, 2012 by Common Sense Media.
- Upon recruitment, panelists become eligible with access to their online member page and are contacted by email to take an online survey questionnaire.
- Adolescent household members are either contacted directly or through their parents for participation. Parental or legal guardian consent is collected to conduct surveys with household members that are 13 to 17 years old.

Sample

- Knowledge Networks: A Growth from Knowledge (GfK) Company recruited 1,030 participants and their responses from February 22 through March 11, 2012, through probability-based sampling.
- The recruitment process utilized dual sample frames through random-digit dialing and address-based sampling.

Measures

- In the context of this and the original study, social media is primarily defined as social networking sites like Facebook, Google Plus, Myspace or blogging sites like Twitter or Tumblr. Participants were asked whether they have created a social network profile and which site they mainly use. Usage frequency is determined by the participant’s number of active posts or passive browsing.
- Responses were collected concerning perceptions around social media sites. Participants were asked whether the use of their preferred social networking site positively or negatively affected their mood or relationships.

RESULTS

Depression

- Chi-square tests revealed no significance between frequency of social media use and effects on depression or happiness.
- Chi-square tests revealed no significance between gender and feeling better or worse.

Gender and Photo Posting

- Chi-square tests revealed no significance for gender and pressure to post photos on social media even when the participant does not want to.
- Significance was found in the relationship between gender and:
 - posting photos of themselves and friends online ($\chi^2(df) = 108.88, p < .001$). A Cramer’s V statistic (.37) suggested a strong relationship.
 - feeling stressed about how they look when they post pictures online ($\chi^2(df) = 28.42, p < .001$). A Cramer’s V statistic (.19) suggested a moderate relationship.
 - worrying about people posting and tagging them in ugly pictures of themselves ($\chi^2(df) = 52.79, p < .001$). A Cramer’s V statistic (.26) suggested a strong relationship.
 - feelings of being excluded from viewing photos of their friends at something they were not invited to ($\chi^2(df) = 66.15, p < .001$).
 - feelings of depression when using social media ($\chi^2(df) = 25.95, p < .001$). A Cramer’s V statistic (.18) suggested a moderate relationship.

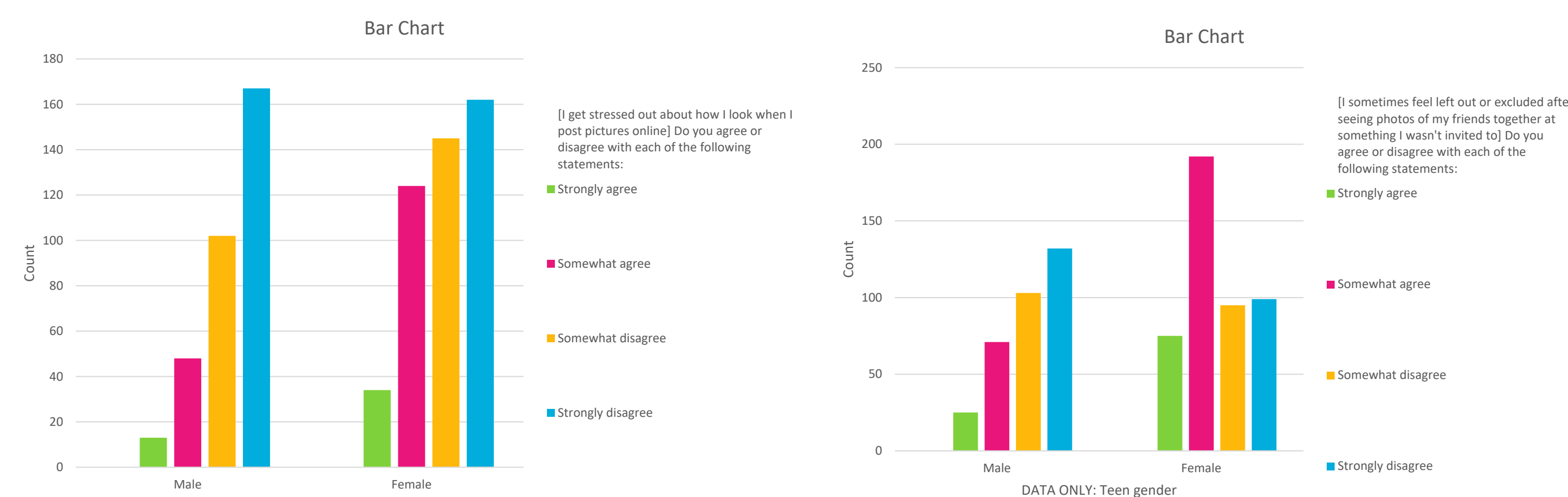


Table 1

Sample Characteristics (N=1,030)

Characteristic	f	%
Gender		
Male	446	43.3
Female	584	56.7
Teen Age (in years)		
13	137	13.3
14	181	17.6
15	218	21.2
16	250	24.3
17	244	23.7
	M = 15.27	SD = 1.351
Race/Ethnicity		
White, Non-Hispanic	634	61.6
Black, Non-Hispanic	73	7.1
Other, Non-Hispanic	38	3.7
Hispanic	227	22.0
2+ Races, Non-Hispanic	58	5.6
Visited a Social Networking Site		
Yes	881	85.5
No	140	13.6
Missing – Refused	9	0.9
Possesses a Profile on a Social Networking Site		
Yes	804	78.1
No	30	2.9
Missing – Refused	1	.01
Missing – System	195	18.9
Main Social Networking Site		
Facebook	743	72.1
Myspace	6	0.6
GooglePlus	7	0.7
Twitter	53	5.1
Other (specify)	9	0.9
Missing – System	212	20.6

Table 5

Chi-Square Results for Impact of Posting Photos Online by Gender

	Do you agree or disagree with the following statements: % (f)				χ^2	p
Gender	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree		
I love posting photos of me and my friends online						
Male	9.7 (32)	32.3 (107)	32.3 (107)	25.7 (85)	108.88	<.001
Female	31.1 (144)	44.3 (205)	17.3 (80)	7.3 (34)		
I get stressed out about how I look when I post pictures online						
Male	3.9 (13)	14.5 (48)	30.9 (102)	50.6 (167)	28.42	<.001
Female	7.3 (34)	26.7 (124)	31.2 (145)	34.8 (162)		
I worry about people posting ugly pictures of me and tagging me in them						
Male	4.2 (14)	21.1 (70)	27.5 (91)	47.1 (156)	52.79	<.001
Female	12.6 (58)	34.2 (158)	27.9 (129)	25.3 (117)		
I feel pressured to post photos even when I don't want to						
Male	1.8 (7)	7.9 (26)	25.8 (85)	64.4 (212)	1.27	.74
Female	2.4 (11)	7.4 (34)	28.9 (133)	61.4 (283)		
I sometimes feel left out or excluded after seeing photos of my friends together at something I wasn't invited to						
Male	7.6 (25)	21.5 (71)	31.1 (103)	39.9 (132)	66.15	<.001
Female	16.3 (75)	41.6 (192)	20.6 (95)	21.5 (99)		
I feel bad about myself when nobody comments on or likes my photos						
Male	4.2 (14)	11.1 (37)	31.3 (104)	53.3 (177)	25.95	<.001
Female	8.4 (39)	21.4 (99)	31.2 (144)	39.0 (180)		

CONCLUSIONS

Summary of Findings

- Inferential statistics uncovered both significant and insignificant results. Contrary to the study’s hypothesis, higher social media usage was not indicative of lower psychological and social wellbeing with only one measure on depression approaching significance. Statistically significant associations were revealed through a series of chi-square tests when analyzing gender and social media use as well as gender and photo posts on social media. Compared to males, females were also more likely to experience feelings of sympathy and connectedness with friends and family, which indicates some positive benefits to social media. However, female participants were more likely to experience a variety of negative emotions associated with posting or viewing photos online.

Strengths

- Large and nationally representative sample
- Gender ratio is relatively even

Limitations

- Cross-sectional and self-reported data with no qualitative responses
- The original dataset is outdated, and the social media landscape has drastically changed

Implications for Research and Practice

- The results of this study emphasizes the need to approach social media with a more nuanced lens instead of with moral panic or a prohibitive mentality.
- Social media platforms differentially affects specific demographics in specific and contextual ways, which should inform or guide further research.
- Social media is here to stay, so social work and clinical practice should seek to integrate its proliferation in assessment and possible treatment.
- Newer and increasingly popular forms of social media should be researched.

REFERENCES

- Anderson, M., & Jiang, J. (2018, May 31). *Teens, social media & technology 2018*. Pew Research Center: Internet, Science & Tech. https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2018/05/PI_2018.05.31_TeensTech_FINAL.pdf
- Coyne, S. M., Rogers, A. A., Zurcher, J. D., Stockdale, L., & Booth, M. C. (2020). Does time spent using social media impact mental health? An eight year longitudinal study. *Computers in Human Behavior*, 104, 106160. <https://doi.org/10.1016/j.chb.2019.106160>
- Kardefelt-Winther, D. (2017). How does the time children spend using digital technology impact their mental well-being, social relationships and physical activity? *Innocenti Discussion Papers*. <https://doi.org/10.18356/cfa6bcb1-en>
- Kelly, Y., Zilanawala, A., Booker, C., & Sacker, A. (2018). Social media use and adolescent mental health: Findings from the UK millennium cohort study. *EClinicalMedicine*, 6, 59-68. <https://doi.org/10.1016/j.eclinm.2018.12.005>
- Leventhal, A. M., Cho, J., Keyes, K. M., Zink, J., Riehm, K. E., Zhang, Y., & Ketema, E. (2021). Digital Media use and suicidal behavior in U.S. adolescents, 2009-2017. *Preventive Medicine Reports*, 23, 101497. <https://doi.org/10.1016/j.pmedr.2021.101497>
- Nesi, J., Choukas-Bradley, S., & Prinstein, M. J. (2018). Transformation of adolescent peer relations in the social media context: Part 1—a theoretical framework and application to dyadic peer relationships. *Clinical Child and Family Psychology Review*, 21(3), 267-294. <https://doi.org/10.1007/s10567-018-0261-x>
- Robinson, A., Bonnette, A., Howard, K., Ceballos, N., Dailey, S., Lu, Y., & Grimes, T. (2019). Social Comparisons, social media addiction, and Social Interaction: An examination of specific social media behaviors related to major depressive disorder in a millennial population. *Journal of Applied Biobehavioral Research*, 24(1). <https://doi.org/10.1111/jabr.12158>
- Twenge, J. M., & Campbell, W. K. (2019). Media use is linked to lower psychological well-being: Evidence from three datasets. *Psychiatric Quarterly*, 90(2), 311-331. <https://doi.org/10.1007/s11126-019-09630-7>
- Twenge, J. M., Martin, G. N., & Campbell, W. K. (2018). Decreases in psychological well-being among American adolescents after 2012 and links to screen time during the rise of smartphone technology. *Emotion*, 18(6), 765-780. <https://doi.org/10.1037/emo0000403>