

2.5: EXPLORING RELATIONSHIPS BETWEEN GENDER, SOCIAL MEDIA USE, AND YOUNG ADULTS' WELL-BEING

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The authors studied the social media use of young men and young women, and found subtle differences in how gender and social media use are related to self-esteem and life satisfaction.

Social media have become ubiquitous in the lives of many people in developed nations. As of the first quarter of 2018, more than two billion individuals have Facebook profiles, and about half of these are active users, meaning they have logged in within the previous month (Statista, 2018). Adoption of social media, however, has varied by population subgroups, with young adults emerging as the dominant users (Rideout, 2015). In reviewing young adults' use of social media, three patterns emerge. First, young adults were, and continue to be, early social media adopters. For example, in 2016, 41% of young adults in the US (age 18–29) used at least one social media site compared to 6% of 30–49 year olds (Pew Research Center, 2017). Second, 18–29 year olds continue to outpace other users, particularly older adults, in sheer numbers, with 86% reporting that they use social media in 2016, compared to 80% of those age 30–49 and only 60% of those age 50–64. Third, young adults tend to use multiple social media platforms (Office of Adolescent Health, 2016), and although Facebook remains the most popular, other sites such as Instagram, Twitter, and Snapchat are utilized frequently (Rideout, 2015).

Theorizing Social Media Effects

Early theorizing of social media's possible effects argued that online activity might reduce young adults' social connectedness and psychological well-being (Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay, & Scherlis, 1998). Later research, however, suggested a more nuanced picture. Although several indicators of well-being, such as social connectedness and psychological functioning, appear positively related to use (see Valkenburg & Peter, 2009), social media use can exacerbate social comparison tendencies and therefore negatively influence well-being (Liu, Li, Carcioppolo, & North, 2016) and self-esteem (Vogel, Rose, Roberts, & Eckles, 2014). Thus, research indicates that the outcomes of social media use are influenced by specific use patterns.

Surprisingly, one variable that has not been considered to a great extent in the quantitative research on social media use is that of possible differences in use and effects patterns for young men compared to young women (see Correa, Hinsley, & de Zuñiga, 2010 for an exception). There is reason to believe that such differences might exist. Research by the Pew Foundation suggested that women use popular social media sites more often and more consistently than their male counterparts do, although this gap is closing (Anderson, 2015). In addition, when studying self-presentation on social media platforms, the Renfrew Center (2014) found that 70% of young women edit pictures of themselves before posting them online, compared to just 50% of young men. Therefore, research suggests that there are gender differences in terms of overall social media use, as well as specific communication practices within each platform.

Social Comparison, Social Media, and Life Outcomes

Social comparison theory argues that people have a natural tendency to evaluate their opinions and abilities against others' (Festinger, 1954). In addition, Festinger (1954) suggested that downward comparison—when we compare ourselves to others who we perceive to be doing worse than ourselves—results in increased self-esteem and perceived well-being. In contrast, upward comparison—to an individual perceived to be doing better than us—results in decreased self-esteem and perceived well-being (Liu et al., 2016).

Recent efforts to integrate social comparison theory into an understanding of how and why individuals might be influenced by their social media use have utilized traditional social comparison scales adapted to Facebook use. For example, Steers, Wickham and Acitelli (2014) found that time spent on Facebook was positively correlated to social comparison. What Steers et al. called social media "highlight reels," reflecting the tendency of individuals to share "only positive and/or self-enhancing news but not fully disclose their daily struggles" (2014, p. 725), combined with social comparison mechanisms, might result in adverse effects for heavy social media users. Furthermore, the fact that young women seem to be photoshopping their uploaded images more than young men (The Renfrew Center, 2014) may suggest that women are more likely to think about image enhancement, and engage in social comparison.

Self-esteem

Self-esteem refers to "the positive or negative evaluations of the self, and how we feel about it" (Smith & Mackie, 2007, p. 17). Self-esteem has been extensively studied and found to be a predictor of many well-being indicators such as academic achievement (Marsh, 1990) and overall happiness (Baumeister, Campbell, Krueger, & Vohs, 2003).

Despite the importance of self-esteem as a predictor of positive outcomes, differences between self-esteem among young men and young women have been found across culture groups. For example, Bleidorn and colleagues (2016) found that self-esteem tended to increase with age from adolescence to adulthood, but men at every age had higher levels of self-esteem than women. This was true across all seven countries included in the analyses. Furthermore, numerous studies have demonstrated a link between social media use and self-esteem (Cingel & Olsen, 2018; Vogel et al., 2014). Thus, if we consider that women use social media more than men (Anderson, 2015) and may have lower self-esteem to begin with, it is important to investigate how gender might play a part in the process. We might consider whether gender influences self-esteem, but we might also ask whether overall social media use, or engagement in self-presentation and social comparison, is related to overall self-esteem.

Life Satisfaction

Life satisfaction "refers to the cognitive dimension of well-being and is considered to be a core measure of individuals' overall well-being" (Tromholt, 2016, p. 663). It is positively correlated with self-esteem (Diener & Diener, 1995), suggesting that the two variables, though conceptually distinct, are experientially linked. There is reason to believe that factors of social media use that decrease self-esteem may have a similar effect on overall life satisfaction. For example, Kross and colleagues (2013) texted participants several times a day to find out what activity they were engaged in (including social media use) and how they were feeling emotionally. The study found that Facebook use predicted declines in the two components of subjective well-being: how people feel moment-to-moment and how satisfied they are with their lives (Kross et al., 2013). In addition, Tromholt (2016) reported that participants who were instructed to take a one-week hiatus from Facebook reported significantly higher levels of life satisfaction, compared to those who continued to use Facebook as normal. Thus, it seems likely that overall social media use is related to overall satisfaction with life. Furthermore, given differential patterns of use between young men and young women, it seems likely that social media use may influence life satisfaction differentially as a function of gender.

Based on what we have described thus far, in this research we ask the following research questions:

- RQ1: Does social media use differ between young men and young women?
- RQ2: Does the frequency of social media self-presentation differ between young men and young women?
- RQ3: Do young men and women differ in their frequency of engaging in social media social comparison?
- RQ4: Is there a relationship between overall social media use and self-esteem?
- RQ5: Is there an interaction between a) social media self-presentation and b) social media social comparison and gender on women's self-esteem?
- RQ6: Is there a relationship between overall social media use and life satisfaction?
- RQ7: Is there an interaction between a) overall social media use and b) social media social comparison and gender on women's life satisfaction?

Testing Social Media Effects

To address our research questions, we surveyed 303 college students between the ages of 18 and 29. The sample included 102 males and 201 females. To increase the size and generalizability of the sample, we recruited participants at two different universities in the United States, one on the west coast and one on the east coast. Participants received a link to an online survey, and gave their consent prior to seeing any survey questions. After reporting their age and gender, participants completed measures of self-esteem (e.g., "I feel that I'm a person of worth;" Rosenberg, 1965), life satisfaction (e.g., "The conditions of my life are excellent;" Diener, Emmons, Larsen, & Griffin, 1985), and online social comparison ("When I am on Facebook, I often compare how I am doing socially (e.g. popularity) with other people;" Cramer, Song, & Drent, 2016). All items were measured on 5-point scales ranging from 1 = Strongly Disagree and 5 = Strongly Agree, or 1 = Never and 5 = Always. In addition, we measured online self-presentation, with three items created for the purposes of this study (e.g., "How often do you ensure that you only post flattering photos of yourself?"). The survey included three attention check items to ensure that participants were reading and answering the questions carefully. Participants who missed two or more of the three attention check questions were removed from the final sample. Finally, all items from each scale were averaged. All scales were reliable ($\alpha \geq .85$).

In addition to these questions about well-being and online behaviors, we also measured participants' overall social media use. To increase the validity of this measure, we asked participants to report how much time they spent using social media from (1) the time they woke up until breakfast, (2) between breakfast and lunch, (3) between lunch and dinner, and (4) from dinner until the time they went to bed. Once participants completed the survey, they were thanked for their time, and received research credit where appropriate.

To investigate whether men and women differed in their reported social media use (RQ1), social media self-presentation (RQ2), and social media social comparison (RQ3), we ran three t-tests. T-tests allow us to test whether two groups (e.g., men and women) differ significantly in terms of the variable of interest (e.g., overall social media use).

Overall, we found that young women reported higher social media use ($M = 123.95$ minutes, $SD = 115.74$) than young men do ($M = 110.24$ minutes, $SD = 111.40$), although this difference was not statistically significant. Young women reported engaging in significantly more self-presentation ($M = 3.58$, $SD = .92$) than young men did ($M = 2.80$, $SD = 1.10$; $t(283) = 6.20$, $p < .01$), and significantly more social media social comparison ($M = 2.99$, $SD = 1.00$) than young men ($M = 2.34$, $SD = 1.10$, $t(283) = 4.97$, $p < .01$). Thus, although young women may not use social media more than young men do, they seem to use it differently. That is, young women are more likely than men to engage in social media self-presentation and social media self-comparison.

Next, we examined the relationship between overall social media use and self-esteem (RQ4) and life satisfaction (RQ6) utilizing two separate hierarchical multiple regressions. Hierarchical multiple regressions allow us to examine whether there is a significant positive or negative linear relationship between two variables, after controlling for other relevant variables, such as gender. Further, we also examined whether social media self-presentation and social comparison affected women and men differently in terms of their self-esteem (RQ5) and life satisfaction (RQ7). For these latter research questions, we conducted a moderation analysis using the PROCESS macro (Hayes, 2013), which tests whether the relationships between social media self-presentation and social comparison on self-esteem and life satisfaction differ as a function of the participants' gender.

In terms of self-esteem, we found that females reported lower self-esteem ($B = -.19$, $p < .01$). On the second block, controlling for gender, overall social media use was not related to self-esteem. Using Model 1 of the Hayes (2013) PROCESS model, we found no significant interaction between gender and self-presentation on self-esteem; however, there was a significant interaction between gender and social media social comparison on self-esteem. Whereas the direct effect of social media social comparison on self-esteem was not significant, the moderated effect of social media use by gender on self-esteem was significant ($b = .01$, 95% CI $[-.230 - -.025]$). The absence of '0' in the confidence interval indicates that social media social comparison is related negatively to self-esteem among young women, but not among young men. Overall, then, young women report lower self-esteem, in comparison to men, and this is exacerbated by engaging in social comparison while using social media.

We conducted the same analyses for life satisfaction. On the first step of the regression, we found that gender is not related to life satisfaction. Controlling for gender, on the second step we found that overall social media use was also unrelated to life satisfaction. To test whether life satisfaction is affected by the way social media is used by males and females, we conducted a moderation analysis using the PROCESS macro (Hayes, 2013; model 1, 5,000 bootstrap sample). We found no significant interaction effect between gender and self-presentation on life satisfaction, nor between gender and social media social comparison on life satisfaction.

Social Media and the Well-Being of Young Adults

Given these overall findings, what can we conclude from research on young adult males' and females' use of social media and how it may influence their well-being? One clear finding is that males and females may not differ in the amount of time they spend using social media, but the way they use it seems to differ in some very specific ways. For example, females report engaging in more social media self-presentation, editing pictures and attempting to present their most idealized online self to a greater extent than their male peers do. Perhaps consequently, or in conjunction, they also reported engaging in greater social comparison online. This may well represent a vicious cycle for female social media users who engage in selective self-presentation in order to perfect their online selves, then compare themselves to others whose images and information are also edited and curated. This creates a social environment that seems rather pernicious.

What then are the possible effects of living in and comparing oneself in this perfected and curated virtual world? Again, there appear to be subtle gender differences. Clearly, young adults are using social media more than any other age cohort. For males, who on average report higher self-esteem than do their female counterparts, more use does not necessarily indicate greater social media self-presentation or greater social comparison. But for females, who generally report lower self-esteem (worldwide, see Bleidorn et al., 2016) there is a negative relationship between specific types of social media use and self-esteem. Specifically, social media social comparison is related to lower self-esteem for women but not for men. Although this finding is concerning, it is consistent with much media research over the past two decades (see Oliver & Krakowiak, 2009 for a review) that suggests it is not media use per se that relates to certain outcomes, but rather the content of those media and the context in which they are used. In the context of young women and social media, these findings suggest that certain kinds of social media use, coupled with lower reported self-esteem, may negatively influence young women's well-being.

IT'S YOUR TURN: WHAT DO YOU THINK? WHAT WILL YOU FIND?

- 1. Think about your own social media use. Do you compare yourself to others online? If so, is it a conscious process or less-than-conscious? How has this reading made you consider your own social comparison processes?
- 2. Think about self-presentation. Is self-presentation online different than it is offline, in everyday life? If so, how? How might the influence of online vs. offline self-presentation on well-being differ?
- 3. Talk with friends of different genders about their social media use. How do the men and women you talk with differ in their social media use? How are your findings similar to or different from the findings presented in this reading? Why do you think it is the case?
- 4. Think about different social media platforms. How do you think different attributes of each platform might influence the findings presented in this reading? Do some platforms seem to encourage social comparison more than others?

References

Anderson, M. (2015). Men catch up with women on overall social media use. Retrieved from: www.pewresearch.org/fact-tank/2015/08/28/men-catch-up-with-women-on-overall-social-media-use/.
Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1–44.
Bleidorn, W., Arslan, R. C., Denissen, J. A., Rentfrow, P. J., Gebauer, J. E., Potter, J., & Gosling, S. D. (2016). Age and gender differences in self-esteem: a cross-cultural window. *Journal of Personality and Social Psychology*, 111(3), 396–410.
Cingel, D. P. & Olsen, M. K. (2018). Getting over the hump: examining curvilinear relationships between adolescent self-esteem and Facebook use. *Journal of Broadcasting and Electronic Media*, 62, 215–231.
Correa, T., Hinsley, A. W., & de Zuñiga, H. G. (2010). Who interacts on the Web? The intersection of users' personality and social media use. *Computers in Human Behavior*, 26(2), 247–253.
Cramer, E., Song, H., & Drent, A. (2016). Social comparison on Facebook: motivation, affective consequences, self-esteem, and Facebook fatigue. *Computers in Human Behavior*, 64, 739–746.
Diener, E. & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68(4), 653–663.
Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71–75.
Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140.
Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: a Regression-based Approach*. New York: Guilford.
Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T., & Scherlis, W. (1998). Internet paradox: a social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017–1031.