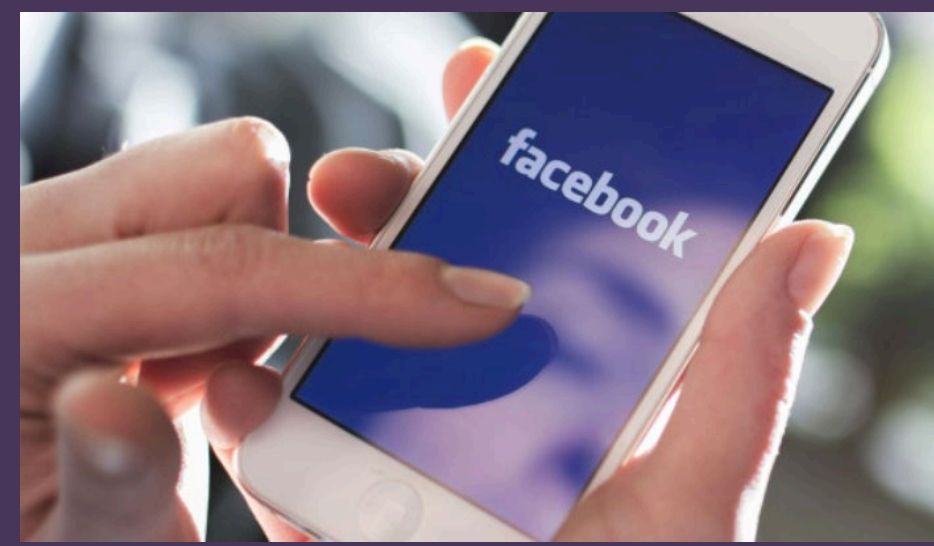


# Social Media Use and Interpersonal Health: Examining Generational Differences

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## Rationale

- The use of social media has increased dramatically over the past decade (e.g., Greenwood, Perrin, & Duggan, 2016); For example, approximately 50% of individuals aged 15 to 35 check social media within the first 15 minutes of waking up in the morning (Lenhart, 2015)
- Past research focuses on specific social media behaviors, such as monitoring or posting information on social media, but does not look at multiple social media behaviors simultaneously (Seidman, Langlais, & Havens, 2017).
- Past studies illustrate that as social media use increases, mental health commonly declines (Vannucci, Flannery, & Ohannessian, 2017; Twenge, Martin, & Campbell, 2018).
- On the other hand, some studies find that social media can have positive effects on individuals' mental health by allowing them to connect with others and form their own self-identity online (Valkenburg & Peter, 2009).
- Age may explain these contradictory findings because young adults, who report using social media the most, may report differences in mental health as a result of social media use compared to middle-aged adults (Greenwood, Perrin, & Duggan, 2016).
- Erikson's Psychosocial Theory of Development (Erikson, 1968; 1983) provides theoretical evidence for why there may be a generational difference for young adults and middle-aged adults' use of social media and their reported level of well-being.
- The goal of young adulthood is to experience the formation of romantic relationships where the use of social media typically assists with romantic relationship formation (Fox, Warber, & Makstaller, 2013), which may benefit young adults' mental health.
- For middle-aged adults, the goal is to experience generativity, a feeling of contributing to society and being satisfied with their contributions.
- Because social media use is associated with social comparison (Vogel, Rose, Roberts, & Eckles, 2014), it is likely that middle-aged adults may think less of their achievements when examining others' achievements.
- Therefore, the goal of this study is to compare how social media use (i.e., Facebook, SnapChat, Instagram, and Twitter) is associated with mental well-being (depression, anxiety, and stress) between young (ages 18 to 23) and middle-aged adults (ages 24 to 40).

## Hypotheses

- Hypothesis 1: Active social media behaviors such as commenting, creating posts, and private messaging will be positively associated with mental health (anxiety, depression, and stress).
- Hypothesis 2: Passive social media behaviors such as monitoring and posting photos will be negatively associated with mental health.
- Hypothesis 3: Age will moderate the relationship between social media use and mental health.

## Measures

**Social media behaviors.** First, participants answered questions regarding how many minutes they spent on the following social media networks: Facebook, SnapChat, Instagram, and Twitter. Next, participants answered questions regarding the frequency of five social media behaviors (posting photos or videos on social media, posting updates that were not photos or videos on social media, writing comments on social media, monitoring others social media content) on each daily survey across Facebook, SnapChat, Instagram, and Twitter. Responses for these questions ranged from 1 (*never*) to 7 (*all the time*).

**Well-being.** Well-being was captured through the Depression, Anxiety, and Stress Scales (DASS-21; Henry & Crawford, 2005). This 21-item scale asks seven items per measure of well-being, with examples being "I felt down-hearted and blue" (depression), "I felt I was close to panic" (anxiety), and "I tend to over-react to situations" (stress). Responses ranged from 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time). Internal consistency was acceptable for all three measures (Cronbach's alpha: depression = .89; anxiety = .83; stress = .86).

## Procedures

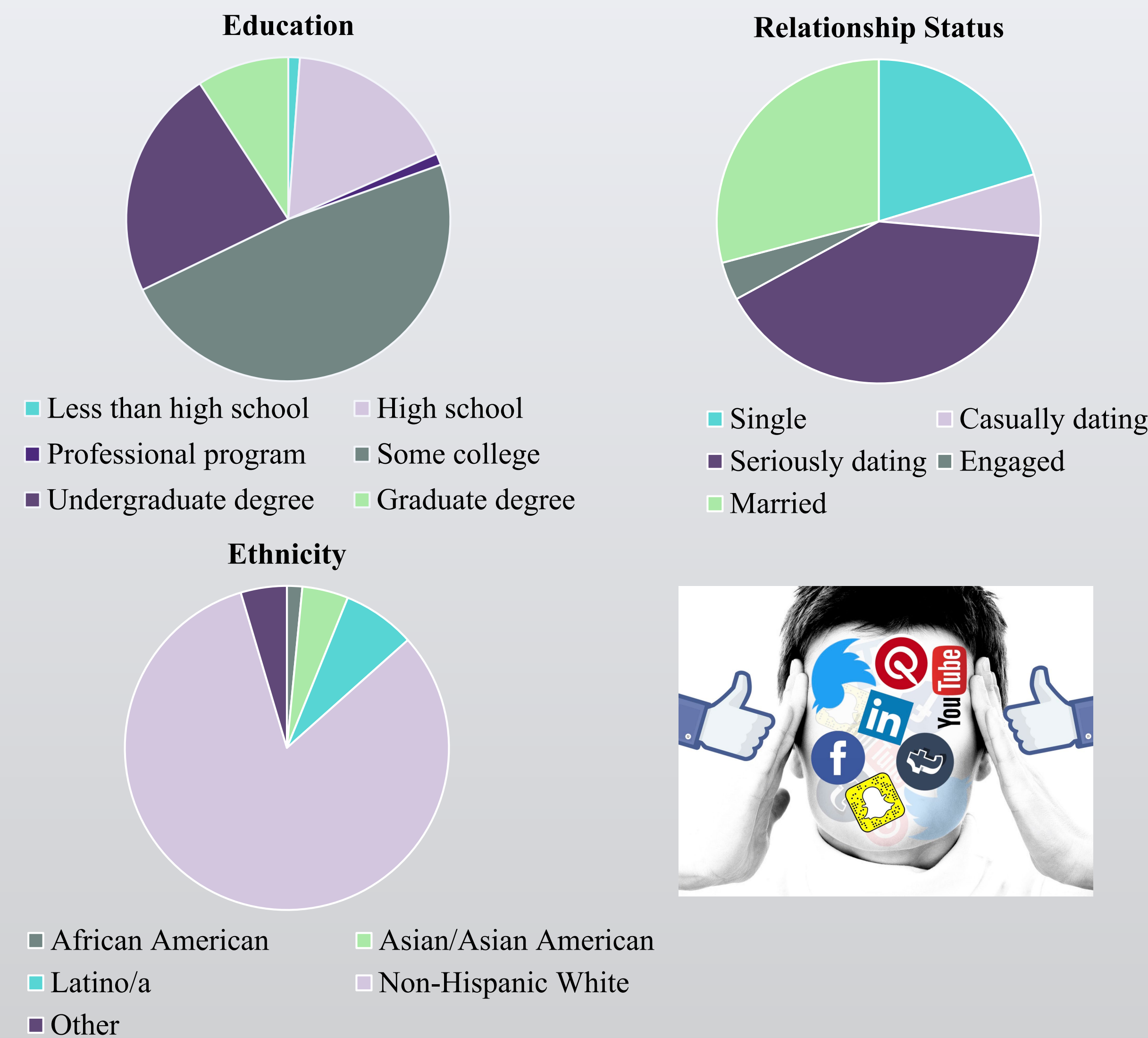
- Participants were recruited through advertisements on local Facebook pages.
- Advertisements stated the study goals, participation requirements (having at least one social media platform and being at least 18 years old), remuneration, and a contact e-mail address.
- Interested participants sent an e-mail to the research team to verify eligibility.
- Eligible participants completed an online survey that took approximately 40 minutes and then nine consecutive daily online surveys that took approximately 15 minutes to complete.
- Participants were paid \$5 for every two online surveys they completed.
- All aspects of this project were approved by the appropriate Institutional Review Boards.

## Analytic Plan

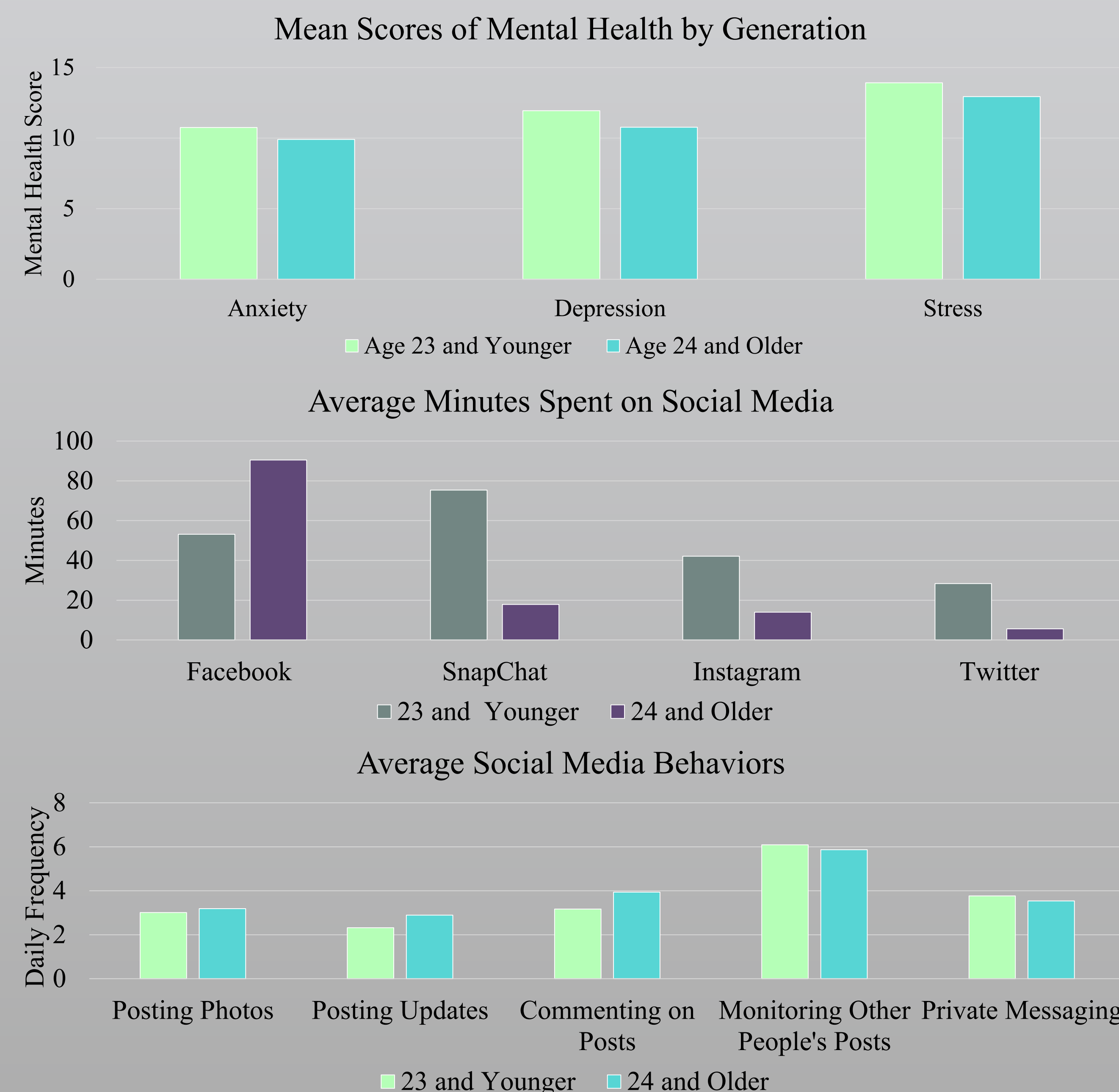
Data was analyzed using linear regression analyses. Control variables (sex, education, race, and sexual orientation) were entered in Step 1. Social media behaviors across Facebook, SnapChat, Instagram, and Twitter were entered in Step 2. Separate regressions were computed for each social media platform, each measure of well-being (depression, anxiety, and stress), and by each age group (age 23 and older versus age 24 and older).

## Participants

- Participants in this study were recruited from two areas in the United States, a small city in the Midwest and an urban city in the Southwest ( $N = 261$ ).
- Approximately 77.0% of participants were female and the average age of participants was 26.76 ( $SD = 10.36$ ; range: 18-40).
- 92.7% of participants described themselves as heterosexual, 5.7% identified as bisexual, and 1.1% identified as homosexual.



## Results



## Results

**Table 2. The influence of social media on well-being according to age group.**

Social Media Behavior	Age 23 and Younger			Age 24 and Older		
	Depression	Anxiety	Stress	Depression	Anxiety	Stress
<i>Model 1</i>						
Facebook Photos	.33 (.00)	.19 (.00)	.18 (.00)	-.31 (.00)*	-.36 (.00)*	-.32 (.00)*
Facebook Posts	.09 (.00)	.43 (.00)	.29 (.00)	.08 (.00)	-.05 (.00)	-.17 (.00)
Facebook Comments	-.38 (.00)	-.31 (.00)	-.36 (.00)	.07 (.00)	.15 (.00)	.46 (.00)*
Facebook Monitoring	-.22 (.00)	-.47 (.00)	-.20 (.00)	.33 (.00)	.42 (.00)*	.21 (.00)
Facebook Private Messaging	.24 (.00)	.34 (.00)	.17 (.00)	.18 (.00)	.11 (.00)	.04 (.00)
$R^2$	.041	.060	.030	.148**	.134**	.104*
<i>Model 2</i>						
SnapChat Photos	.48 (.00)	.24 (.00)	.04 (.00)	.19 (.01)	-.13 (.01)	-.23 (.01)
SnapChat Posts	-.02 (.00)	.28 (.00)	.11 (.00)	.08 (.01)	-.00 (.01)	-.03 (.01)
SnapChat Comments	.20 (.00)	-.03 (.00)	-.19 (.00)	-.54 (.02)	.18 (.01)	.32 (.02)
SnapChat Monitoring	-.44 (.00)	-.23 (.00)	.08 (.00)	.61 (.01)	.60 (.01)*	.31 (.01)
SnapChat Private Messaging	-.18 (.00)	-.14 (.00)	.00 (.00)	-.25 (.01)	-.67 (.01)*	-.43 (.01)
$R^2$	.033	.035	.004	.037	.047	.022
<i>Model 3</i>						
Instagram Photos	.43 (.00)	.22 (.00)	.04 (.00)	.37 (.01)	-.55 (.01)	.33 (.01)
Instagram Posts	.05 (.00)	.41 (.00)	.18 (.00)	-.18 (.01)	-.28 (.01)	-.11 (.01)
Instagram Comments	-.06 (.00)	-.30 (.00)	-.31 (.00)	-.24 (.01)	.07 (.01)	-.01 (.01)
Instagram Monitoring	-.32 (.00)	-.35 (.00)	-.08 (.00)	.06 (.01)	-.16 (.01)	-.04 (.01)
Instagram Private Messaging	-.14 (.00)	.08 (.00)	.13 (.00)	.06 (.01)	-.23 (.01)	-.22 (.01)
$R^2$	.036	.025	.010	.022	.029	.015
<i>Model 4</i>						
Twitter Photos	.27 (.01)	.12 (.01)	-.22 (.01)	-.62 (.03)	-.15 (.02)	-.42 (.03)
Twitter Posts	.36 (.01)	.73 (.01)**	.53 (.01)*	.29 (.03)	-.23 (.02)	.07 (.03)
Twitter Comments	.26 (.01)	-.04 (.01)	-.12 (.01)	-.39 (.03)	-.48 (.02)	-.18 (.03)
Twitter Monitoring	-.82 (.01)	-.77 (.01)	-.50 (.01)	.55 (.03)	1.00 (.02)	.53 (.03)
Twitter Private Messaging	.05 (.01)	.13 (.01)	.43 (.01)	.22 (.02)	-.21 (.02)	-.09 (.02)
$R^2$	.056	.103*	.046	.061	.024	.019

*Note:* Data are standardized beta coefficients and presented as  $B(SD)$ .  $R^2$  represents change in  $R$  from Step 1 (control variables) to Step 2 via regression analyses.  
\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ .

**Table:** For participants 23 and younger, social media behaviors on Facebook, SnapChat, and Instagram were not related to mental health. However, posting on Twitter was positively associated with anxiety and stress for these participants. For participants 24 and older, monitoring on SnapChat and Facebook as well as commenting on Facebook was positively associated with mental health. Interestingly, posting photos on Facebook was negatively associated with mental health. The models including Facebook behaviors were significant, explaining 10-15% of the variance in mental health.

## Discussion

- The goal of this study was to understand how young adults and middle-aged adults use various social media platforms and how these platforms impact their mental health.
- Based on the results of this study, middle-aged adults' mental health appears to be negatively associated with social media use, but not significantly associated with young adults' mental health.
- These results can be explained by Erikson's Psychosocial Theory of Development (Erikson 1968; 1983) as middle-aged adults engage with social media differently than young adults.
- Older adults may compare their contributions to what others are sharing on social media, which are usually idealized experiences (Leary & Allen, 2011), and is representative of the Generativity vs. Stagnation stage.
- Young adults may care more about the interactions they have with other people as opposed to what other people share as they are trying to form their identity or form a relationship during this period of development.
- Clinicians and practitioners may use information from this study to promote client health, recommending to monitor and limit their time on social media particularly for older adults.

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