




All Social Media Are Not Created Equal: Instagram, Finsta, and Loneliness

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Abstract

Research on the relationships between social media use and loneliness has produced mixed findings, in part because people use social media in different ways. Finsta is a private Instagram account followed only by a small group of the user's friends and is considered to be a more authentic form of social media. The purpose of the present study was to examine the differential associations of Instagram and Finsta use with social and emotional loneliness and to investigate off-line engagement as a potential mediator of these associations. With data from an online survey given to $N = 330$ emerging adults, a series of hierarchical linear regressions showed that Instagram use negatively predicted and Finsta use positively predicted social loneliness, whereas neither were associated with emotional loneliness. Furthermore, whereas Finsta use was not associated with off-line social engagement with friends (OSE-friend), Instagram use was positively associated with this variable. In addition, results showed that off-line social support with friends partially mediated the relationship between Instagram use and social loneliness. The findings imply that all social media are not created equal; even within the same platform (Instagram), differential associations were found with social loneliness depending on the type of account used.

Keywords: *social media, loneliness, Instagram*

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All Social Media Are Not Created Equal: How Finsta and Instagram Use Differ in Their Associations With Loneliness and Social Engagement in a Sample of Emerging Adults

According to a study from the Pew Research Center, emerging adults ages 18 to 29 are the most common users of social media; 84% of emerging adults ages 18 to 29 (Arnett, 2000) reported that they have social media accounts (Auxier & Anderson, 2021). Given the widespread use of social media, researchers over the past decade have focused on the mental health implications of social media use, particularly in relation to face-to-face social interactions and loneliness. Research findings concerning the relationship between social media use and loneliness are conflicting. Ryan et al. (2017) suggested that these differential findings may stem from differences in how individuals are utilizing social media. Although Instagram is a well-known and well-researched social media platform, Finstas (“fake Instas”) are a type of Instagram account that, though popular (Gold, 2016), has not been researched extensively. The purpose of the present study was to determine whether Finsta use and Instagram use differ in their associations with social loneliness, emotional loneliness, and off-line social engagement with friends (OSE-friend) as a means to better understand the socioemotional implications of the different ways in which users interact with social media. Exploration of this topic was especially important in light of the social distancing and lockdown measures that have been put in place during the COVID-19 pandemic; recent research has shown that young adults and adolescents have relied on increased social media use to cope with feelings of loneliness during the pandemic (Cauberghe et al., 2021; Lisitsa et al., 2020).

Instagram and Finsta

Instagram is among the most popular social media platforms, with 1 billion active users as of 2018 (Constine, 2018). As with other forms of social media, Instagram has several unspoken “rules” regarding what content is acceptable to post. These rules encourage users to avoid posting content that is unflattering or negative, content that is rambling and contains excessive information, and content that could damage the personal or professional lives of users or their friends and family (Bryant & Marmo, 2012). Users often “untag” themselves from unflattering or risky images (Strano & Queen, 2013). Pressure exists to appear perfect in photos and to engage in “like-seeking” behavior to get as many likes as possible (Chua & Chang, 2016; Dumas et al., 2017).

A Finsta account is a small, private Instagram account that is followed only by a user’s closest friends (Safronova, 2015). In contrast to the polished and curated self-presentation norms of a traditional Instagram account, Finsta users present an unfiltered version of themselves through posting embarrassing photos, emotional venting and rambling, and funny stories (Dewar et al., 2019). Because Finsta users forgo the unspoken rules and formalities of traditional Instagram use, Finsta is considered to be a more authentic form of social media (Duffy & Chan, 2019).

Relationship Maintenance

To fully understand how interpersonal interactions occur on social media, it is important to understand how the maintenance of friendships typically occurs in face-to-face settings. Several components are involved in the maintenance of interpersonal relationships. First, the maintenance of close friendships requires an investment of time and regular contact (Roberts & Dunbar, 2011). Failure to provide this investment of time and contact can result in reduced feelings of closeness. Research has suggested that the frequency of interactions between friends positively predicts satisfaction with the friendship (Amati et al., 2018; Oswald et al., 2004). Hall (2018a) found that as friendships become closer, successful maintenance of the relationship depends more on the quality of the interactions than the frequency.

Second, energy is another resource that must be expended in the maintenance of interpersonal relationships. In a seminal sociological book, *The Presentation of Self in Everyday Life*, Goffman (1959) proposed the idea that people

regularly engage in self-presentation efforts when around others to portray a more flattering and socially appropriate version of themselves. “Backstage” behavior refers to how people act when they are alone and can drop their self-presentation efforts. Some research has suggested that the self-regulatory effort required in “front stage” behavior involves the utilization of a finite social energy resource that, when depleted, can result in fatigue (Evans et al., 2016; Hagger et al., 2010; Inzlicht & Friese, 2019). Effortful “front stage” self-presentation is typically used when interacting with individuals who are not close, whereas those in close interpersonal relationships can engage in more “backstage” behavior with each other (Gosnell et al., 2011). Similarly, Dominguez et al. (2020) found that interactions between individuals with more established relationships require less self-regulatory behavior and less expenditure of social energy.

Third, there is evidence to suggest that intimate disclosures also play a significant role in the maintenance of relationships. The social sharing of emotions can serve as a bonding experience and can help strengthen social ties (Rimé et al., 2020). Self-disclosures between conversational partners foster relational intimacy (Willems et al., 2020). Relational intimacy can have important benefits; feelings of being understood, accepted, and valued are associated with increased intimacy in interpersonal interactions. People are more likely to self-disclose after receiving an intimate disclosure themselves (Jiang et al., 2013). A reciprocal relationship exists between liking others and disclosing information (Sprecher & Treger, 2015). Individuals disclose to those whom they like, and concurrently, people like those who disclose to them. It may be the case that these components of relationship maintenance are also important for interactions that occur on social media.

Finsta, Instagram, and Relationship Maintenance

All communication activities, including face-to-face interactions and social media use, are competing for the individual’s attention (Zulli, 2018). Considering the time-intensive requirements for maintaining a friendship, it may be more time efficient for individuals to keep in touch via social media instead of other communication channels (e.g., face-to-face interactions, texting, phone calls; Wellman, 2012). Additionally, because Finsta is thought to present a more authentic and realistic version of users when compared to traditional Instagram, one does not have to invest as much energy into self-presentation in their Finsta interactions (Duffy & Chan, 2019). Because Finsta posts are generally more intimate and contain more self-disclosures than a traditional Instagram account, Finsta interactions can potentially mimic intimacy in a way that Instagram interactions cannot. A study by Burke and Develin (2016) showed that users are more likely to share emotional content on a social media account that is followed by close ties, such as a Finsta account. Additionally, they found that posting emotional content can have the effect of yielding longer, more emotional comments from followers. Additionally, Finsta users tend to share funny content, which can also generate feelings of closeness between users (Kang & Wei, 2019; Treger et al., 2013). Taking into account Finsta’s ability to address desires for intimacy and humor, Finsta’s norm of content showing low-effort backstage behavior, as well as the time investment required for maintaining a friendship, Finsta appears to be a suitable medium with which to replace off-line social interactions.

On the other hand, traditional Instagram use may not sufficiently address relational needs. Jiang et al. (2013) found that people are more likely to respond to an intimate disclosure with an intimate self-disclosure of their own when communicating online. Because traditional social media, such as Instagram, typically consists of casual, low-intimacy posts, there are fewer opportunities for this reciprocity of intimate disclosures to occur (Davis, 2012). Lee et al. (2013) found that those who engage in self-disclosure online are more likely to receive social support from others; because Instagram users do not frequently self-disclose on their main accounts, they are less likely to receive this social support from traditional Instagram use. Furthermore, most users of a traditional social media account do not feel as though they have socially interacted after spending time on such an account (Hall, 2018b). Because traditional Instagram use may not be adequate in addressing the desires and requirements associated with maintaining a friendship, it seems logical to conclude that Instagram use cannot as easily replace off-line social interaction.

Loneliness and Social Media

The uses and gratifications model (Katz et al., 1973) served as our theoretical framework. This model posits that audiences actively select forms of media with which to engage to satisfy certain social and psychological needs. Sundar and Limperos (2013) suggested that social media use may represent the clearest case of active audience engagement with media, so much so that the consumers of social media are typically referred to as “users.” Nadkarni and Hofmann (2012) suggested that social media use is driven by two social needs: the need to belong and the need for self-presentation. Similarly, a study by Malik et al. (2016) showed that users share photos on social media to gratify social needs such as affection, attention seeking, disclosure, habit, information sharing, and social influence. It is possible that resolving feelings of loneliness may be one gratification that individuals seek when using social media.

Loneliness refers to the sensation brought about by a perception of inadequate quality or quantity of interpersonal relationships (Cacioppo et al., 2015) and can be thought of as having two dimensions: emotional loneliness and social loneliness. Emotional loneliness refers to the sense of having an inadequate quality of social relationships, namely a lack of intimacy and close personal relationships (de Jong Gierveld & van Tilburg, 2006; Neto, 2015). Social loneliness, on the other hand, refers to the feeling resulting from an insufficient quantity of social relationships, specifically the absence of a wider social circle or group of contacts.

Several studies have linked social media use with increased loneliness (Costa et al., 2018; Phu & Gow, 2019; Reissmann et al., 2018; Twenge et al., 2019), although other studies have found that social media use is associated with reduced loneliness (Deters & Mehl, 2013; Hunt et al., 2018). Ryan et al. (2017) suggested that these mixed findings may arise because the relationship between social media use and loneliness depends on how users engage with social media. In the literature on social media, two main hypotheses have emerged that attempt to understand the relationship between social media use and loneliness: the stimulation hypothesis and the displacement hypothesis (Nowland et al., 2018). The stimulation hypothesis suggests that social media use reduces loneliness by enriching existing relationships (Hunt et al., 2018; Sutcliffe et al., 2018; Valkenburg & Peter, 2007), whereas the displacement hypothesis suggests that social media use increases loneliness by replacing off-line interactions with online ones (Costa et al., 2018; Nowland et al., 2018).

Whether social media has a displacing or stimulating effect on social interactions may depend on the type of social media account being used. Feelings of social connectedness that derive from social media use are distinct from social connectedness from in-person interactions (Grieve et al., 2013). A study by Rains et al. (2017) showed that social support is less beneficial when given through a digital medium when compared to support given in face-to-face interactions. Similarly, Ahn and Shin (2013) found that although social media use can emulate social interactions by allowing for connectedness without face-to-face interaction, it is not effective in avoiding the feelings of social isolation that can lead to loneliness.

Burke et al. (2011) outlined three main types of social media activities. The first, direct communication, involves targeted one-on-one communication between users. This can include written communication such as comments, wall posts, and direct messages, as well as one-click communication such as liking content or tagging a user in a post. The second activity is passive consumption, which involves viewing content posted by others. The third type of social media activity is broadcasting, which involves posting untargeted content that is intended to be viewed by all of a user’s followers as opposed to one specific person.

It appears that most social benefits of social media use are derived from direct communication. Receiving direct social media communication from strong ties is positively related to well-being (Burke & Kraut, 2016). For social media users going through a stressful event, direct written communication on social media is associated with the greatest increases in tie strength (Burke & Kraut, 2014). Direct communication appears to be beneficial for relational intimacy as well. Relationship maintenance and development are both motivators for engaging in direct communication on social media (Bazarova & Choi, 2014; Utz, 2015). Bazarova et al. (2015) found that emotions

shared in direct messages are more intense than those shared in broadcasted status updates. Similarly, disclosures via private messages are viewed as more intimate than broadcasted content (Bazarova & Choi, 2014; Utz, 2015). Additionally, social media users judged relationships to be more intimate when receiving private messages than they did for broadcasted posts (Bazarova, 2012). In one study, the intimacy of private messages was found to be the strongest predictor of feeling connected to others on social media (Utz, 2015).

Because broadcasted content on Finsta is more intimate than that of a traditional Instagram account, Finsta users may rely on this broadcasted content for their relational intimacy needs. Burke and Develin (2016) found that posting intimate and emotional content results in a reduction in private messages. It may be the case that frequent Finsta use is detracting from more beneficial forms of communication. Because Finsta use appears to be addressing users' needs for interaction and intimacy in their friendships, Finsta users may devote more time toward Finsta and less time toward interactions shown to improve feelings of connectedness and to reduce feelings of loneliness, such as direct social media communication, face-to-face interaction, and phone calls (Liu et al., 2014; Petersen et al., 2016; Twenge et al., 2019). For this reason, patterns of Finsta use may align more with the displacement hypothesis. Meanwhile, traditional Instagram, which utilizes low-intimacy broadcasted content, does not appear to address users' needs for intimacy, so users may rely more on direct communication channels to fulfill these needs. Thus, patterns of traditional Instagram use may align more with the stimulation hypothesis.

The Population of Focus

We chose to focus on emerging adults in the present study. According to a survey from the Pew Research Center, 71% of adults ages 18 to 29 reported using Instagram (Auxier & Anderson, 2021). Emerging adults have been shown to prefer Instagram over other popular social media platforms (Pittman, 2015). Additionally, reports have identified that most children begin using social media between the ages of 12 and 13 ("Kids and Tech," 2016; "Common Sense Media, 2016; Influence Central, n.d.). Because Finsta began to become prevalent among young users in 2015 (Merriam Webster, n.d.) when emerging adults were between the ages of 13 and 24, they would likely have already been Instagram users and would have been the primary demographic to adopt this trend. Furthermore, recent research has revealed differences in how males and females interact with social media (Haferkamp et al., 2012; Heffer et al., 2019; Krasnova et al., 2017; Thelwall & Vis, 2017; Twenge & Martin, 2020). For example, adolescent girls spend more time on social media and also tend to be more negatively affected by heavy usage (Twenge & Martin, 2020). However, due to the demographic composition of the university at which data were collected, the sample in the present study was primarily female. Though research indicated that an exploration of gender differences may be warranted, we were unable to explore these differences in the present study and instead focused on differences between Instagram and Finsta use.

The Present Study

Although there is a wide body of research on general social media and Instagram use, fewer studies have focused on Finsta use. To our knowledge, this was the first study to examine Finsta use through the lens of the displacement and stimulation hypotheses. Based on the current literature on social media, we made the following predictions:

- Hypothesis 1: In line with the stimulation hypothesis, Instagram use will be negatively associated with social and emotional loneliness.
- Hypothesis 2: In line with the displacement hypothesis, Finsta use will be positively associated with social and emotional loneliness.
- Hypothesis 3: Instagram use will be positively associated with off-line social engagement with friends.
 - Hypothesis 3a: Off-line social engagement with friends partially mediates the negative association between Instagram use and loneliness.
- Hypothesis 4: Finsta use will be negatively associated with off-line social engagement with friends.
 - Hypothesis 4a: Off-line social engagement with friends partially mediates the positive association between Finsta use and loneliness.

Method

Participants were recruited through multiple methods, including solicitation flyers, social media posts, the undergraduate psychology participant pool of a medium-size Northeast U.S. university, and snowball sampling. We collected data via online surveys from $N = 330$ emerging adults between the ages of 18 to 29 ($M = 20.79$ years). Our sample consisted of 20.3% ($n = 67$) males, 77.0% ($n = 257$) females, and 1.8% ($n = 6$) individuals who identified as another gender. The sample was 49.1% White, 17.6% Asian, 14.5% Hispanic or Latino, 7.9% Black, and 10.0% other. In terms of relationship status, 48.2% ($n = 159$) of participants were single, 38.8% ($n = 128$) were in a committed relationship, and 13% ($n = 43$) were casually dating. Participants answered self-report questions relating to Instagram use, Finsta use, loneliness, and off-line social engagement. All participants gave informed consent prior to completing the survey. This study fully complied with the protocols set forth by the institutional review board at the affiliated university.

Measures

Instagram and Finsta Use

Instagram use was measured using a five-item scale that was created for the present study. Items on this scale assessed how often users perform various functions on their main Instagram account: posting content, tagging other users in content, viewing other users' content, liking content, and commenting on content. Items were measured on a 6-point Likert scale, from 1 (*never*) to 6 (*very frequently, about once an hour or more*). The five items were added to create a sum score ranging from 5 to 30, with a larger score representing greater Instagram use. This scale had high internal consistency ($\alpha = .74$). Finsta use was measured with a scale identical to the Instagram use scale, with the words "main Instagram account" replaced with "Finsta account." This scale also had high internal consistency ($\alpha = .89$).

Emotional and Social Loneliness

Loneliness was measured with the de Jong Gierveld Loneliness Scale (de Jong Gierveld & Tilburg, 2006). The scale consisted of two three-item subscales that assessed emotional loneliness (e.g., "I miss having people around me") and social loneliness (e.g., "There are enough people I feel close to"). Each item was scored on a 2-point Likert scale from 0 (*no*) to 1 (*more or less or yes*). Responses to each item were summed to create a score from 0 to 3 for each subscale, with a higher score indicating greater loneliness. This scale for overall loneliness had high internal consistency ($\alpha = .72$), as did the social loneliness subscale ($\alpha = .77$). The emotional loneliness subscale had moderate internal consistency ($\alpha = .57$).

Off-Line Social Engagement

OSE-friend was measured using the friendship subscale of the Lubben Social Network Scale (Lubben, 1988). This subscale consisted of six items that assessed social involvement with friends. We adapted this scale to directly indicate that "seeing or hearing from others" included phone calls, video chats, text messages, and emails but excluded social media communication. Items that assessed the number of social ties (e.g., "How many friends do you see or hear from at least once a month?") were scored on a scale from 0 (*none*) to 5 (*nine or more*). Items that assessed frequency of communication (e.g., "How often do you hear from the friend with whom you have most contact?") were scored on a scale from 0 (*less than monthly*) to 5 (*daily*). Items that assessed social participation (e.g., "When one of your friends has an important decision to make, how often do they talk to you about it?") were scored on a scale from 0 (*never*) to 5 (*always*). All six items were summed to create a score ranging from 0 to 30, with a larger score indicating more social engagement with friends. The friendship subscale had high internal consistency ($\alpha = .82$).

Results

Descriptive Statistics

Of the 330 participants in our sample, 92.7% ($n = 306$) reported having an Instagram account, and 35.5% ($n = 117$) reported having a Finsta account. On average, participants reported moderately high Instagram use ($M = 19.75$, $SD = 4.21$) and moderate Finsta use ($M = 17.83$, $SD = 6.07$). Our sample had a mean emotional loneliness of 1.79 ($SD = 1.05$) and a mean social loneliness of 1.43 ($SD = 1.24$). As shown in Table 1, participants had a moderate level of OSE-friend ($M = 18.04$, $SD = 5.83$).

Unsurprisingly, Instagram use was highly correlated with Finsta use ($r = .32$, $p < .001$; see Table 1). Social loneliness and emotional loneliness were also highly correlated ($r = .31$, $p < .001$). OSE-friend was negatively correlated with both social loneliness ($r = -.40$, $p < .001$) and emotional loneliness ($r = -.22$, $p < .001$). Whereas Finsta use was positively correlated with social loneliness ($r = .23$, $p = .012$), Instagram use was negatively correlated with social loneliness ($r = -.18$, $p = .002$). Additionally, Instagram use was highly correlated with OSE-friend ($r = .20$, $p < .001$).

Predicting Loneliness and Friend Social Engagement From Instagram and Finsta Use

To test our hypotheses, we conducted a series of two-step hierarchical linear regressions controlling for age, gender, ethnicity, and relationship status. We examined Instagram use and Finsta use in separate regression models because including both in the same models reduced our sample size to only those with Finsta accounts ($n = 117$).

Loneliness

Neither Instagram use ($\beta = .01$, $p = .905$) nor Finsta use ($\beta = .15$, $p = .122$) were associated with emotional loneliness (see Table 2). Instagram use was significantly negatively associated with social loneliness ($\beta = -.17$, $p = .003$; see Table 3), providing partial support for Hypothesis 1. In contrast, Finsta use was significantly positively associated with social loneliness ($\beta = .27$, $p = .004$; see Table 3), providing partial support for Hypothesis 2.

OSE-Friend

In line with Hypothesis 3, Instagram use was positively associated with OSE-friend ($\beta = .20$, $p = .001$; see Table 4). To determine whether OSE-friend might mediate the association between Instagram use and social loneliness, we followed that analysis with a three-step hierarchical linear regression in which we added OSE-friend to the model predicting social loneliness from Instagram use. As shown in Table 5, when OSE-friend was added to the model in Step 3, Instagram use no longer significantly predicted social loneliness ($\beta = -.10$, $p = .08$), supporting Hypothesis 3a. This partial mediation is depicted in Figure 1; essentially, it appears that Instagram use is positively associated with OSE-friend, which is in turn associated with lower levels of social loneliness.

As shown in Table 4, Finsta use was not significantly associated with OSE-friend ($\beta = .15$, $p = .111$); therefore, Hypothesis 4 was not supported, and we did not test for OSE-friend as a mediator between Finsta use and social loneliness. Thus, Hypothesis 4a was also not supported.

Table 1. Means, Standard Deviations, and Intercorrelations for All Study Variables

| Variable | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------------------------|----------|-----------|--------|------|-------|-------|--------|------|--------|--------|
| 1. Age | 20.79 | 2.86 | | | | | | | | |
| 2. Gender (female) | 77.9% | n/a | -.14* | | | | | | | |
| 3. Ethnicity (White) | 49.1% | n/a | -.01 | -.08 | | | | | | |
| 4. Relationship status (single) | 48.2% | n/a | .16** | .03 | -.03 | | | | | |
| 5. Instagram use | 19.75 | 4.21 | .05 | .08 | -.12* | .09 | | | | |
| 6. Finsta use | 17.83 | 6.07 | .03 | .01 | -.08 | .12 | .32 | | | |
| 7. Emotional loneliness | 1.79 | 1.05 | -.06 | -.02 | .12* | -.11* | -.03 | .12 | | |
| 8. Social loneliness | 1.43 | 1.24 | .01 | -.00 | .01 | -.12* | -.18** | .23* | .31** | |
| 9. OSE-friend | 18.04 | 5.83 | -.18** | -.00 | -.09 | .08 | .20** | .16 | -.22** | -.40** |

* $p < .05$, ** $p < .01$

Table 2. Hierarchical Linear Regression Predicting Emotional Loneliness From Finsta Use (top) and Instagram Use (bottom)

| Variable | Step 1 | | | | Step 2 | | | |
|---------------------|----------|-----------|---------|----------|----------|-----------|---------|----------|
| | <i>B</i> | <i>SE</i> | β | <i>p</i> | <i>B</i> | <i>SE</i> | β | <i>p</i> |
| Age | .01 | .05 | .02 | .825 | .01 | .05 | .02 | .842 |
| Gender | -.04 | .25 | -.02 | .871 | -.04 | .25 | -.02 | .859 |
| Ethnicity | .11 | .07 | .16 | .092 | .12 | .07 | .17 | .073 |
| Relationship status | .00 | .11 | .00 | .970 | -.01 | .10 | -.01 | .897 |
| Finsta use | | | | | .03 | .02 | .15 | .122 |
| Age | -.02 | .02 | -.04 | .473 | -.02 | .02 | -.04 | .471 |
| Gender | .03 | .14 | .01 | .857 | .03 | .14 | .01 | .864 |
| Ethnicity | .10 | .04 | .15 | .012* | .10 | .04 | .15 | .012* |
| Relationship status | -.11 | .06 | -.10 | .095 | -.11 | .07 | -.10 | .094 |
| Instagram use | | | | | .00 | .01 | .01 | .905 |

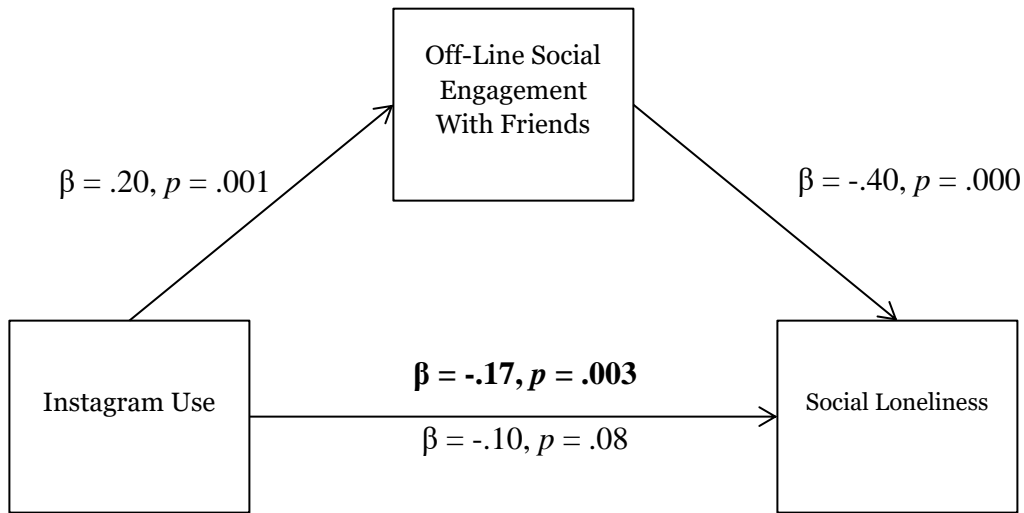
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3. Hierarchical Linear Regression Predicting Social Loneliness From Finsta Use (top) and Instagram Use (bottom)

| Variable | Step 1 | | | | Step 2 | | | |
|---------------------|----------|-----------|---------|----------|----------|-----------|---------|----------|
| | <i>B</i> | <i>SE</i> | β | <i>p</i> | <i>B</i> | <i>SE</i> | β | <i>p</i> |
| Age | -.00 | .06 | -.01 | .942 | -.01 | .06 | -.01 | .906 |
| Gender | -.24 | .31 | -.08 | .438 | -.25 | .30 | -.09 | .407 |
| Ethnicity | .11 | .08 | .13 | .180 | .12 | .08 | .15 | .115 |
| Relationship status | -.10 | .13 | -.07 | .444 | -.14 | .13 | -.10 | .270 |
| Finsta use | | | | | .06 | .02 | .27 | .004** |
| Age | .01 | .03 | .03 | .590 | .02 | .03 | .04 | .497 |
| Gender | -.01 | .17 | -.01 | .937 | .02 | .17 | .01 | .887 |
| Ethnicity | .01 | .05 | .01 | .914 | -.01 | .05 | -.01 | .822 |
| Relationship status | -.16 | .08 | -.12 | .036* | -.14 | .08 | -.11 | .063 |
| Instagram use | | | | | -.05 | .02 | -.17 | .003** |

* $p < .05$. ** $p < .01$. *** $p < .001$.

Figure 1. *Off-Line Social Engagement Mediates the Relationship Between Instagram Use and Social Loneliness.*



*Bolded results are before OSE-friend was added to the model.

Table 4. *Hierarchical Linear Regression Predicting Off-Line Social Engagement With Friends From Finsta Use (top) and Instagram Use (bottom)*

| Variable | Step 1 | | | | Step 2 | | | |
|---------------------|--------|------|---------|----------|--------|------|---------|----------|
| | B | SE | β | <i>p</i> | B | SE | β | <i>p</i> |
| Age | -.21 | .26 | -.09 | .414 | -.22 | .25 | -.09 | .397 |
| Gender | .47 | 1.28 | .04 | .717 | .45 | 1.28 | .04 | .727 |
| Ethnicity | -.63 | .34 | -.18 | .065 | -.60 | .34 | -.17 | .080 |
| Relationship status | -.36 | .54 | -.06 | .509 | -.45 | .54 | -.08 | .405 |
| Finsta use | | | | | .13 | .08 | .15 | .111 |
| Age | -.38 | .12 | -.18 | .002** | -.39 | .12 | -.19 | .001*** |
| Gender | -.86 | .81 | -.06 | .290 | -1.06 | .79 | -.08 | .183 |
| Ethnicity | -.43 | .23 | -.11 | .058 | -.35 | .23 | -.09 | .125 |
| Relationship status | .44 | .36 | .07 | .223 | .34 | .36 | .05 | .347 |
| Instagram use | | | | | .28 | .08 | .20 | .001*** |

p* < .05. *p* < .01. ****p* ≤ .001.

Table 5. Hierarchical Linear Regression Predicting Social Loneliness From Instagram Use and Off-Line Social Engagement With Friends (OSE-friend)

| Variable | Step 1 | | | | Step 2 | | | | Step 3 | | | |
|---------------------|--------|-----|---------|----------|--------|-----|---------|----------|--------|-----|---------|----------|
| | B | SE | β | <i>p</i> | B | SE | β | <i>p</i> | B | SE | β | <i>p</i> |
| Age | .01 | .03 | .03 | .590 | .02 | .03 | .04 | .497 | -.02 | .02 | -.04 | .506 |
| Gender | -.01 | .17 | -.01 | .937 | .02 | .17 | .01 | .887 | -.07 | .16 | -.02 | .680 |
| Ethnicity | .01 | .05 | .01 | .914 | -.01 | .05 | -.01 | .822 | -.04 | .05 | -.05 | .371 |
| Relationship status | -.16 | .08 | -.12 | .036* | -.14 | .08 | -.11 | .063 | -.12 | .07 | -.09 | .106 |
| Instagram use | | | | | -.05 | .02 | -.17 | .003** | -.03 | .02 | -.10 | .080 |
| OSE-friend | | | | | | | | | -.08 | .01 | -.40 | .000*** |

p* < .05. *p* < .01. ****p* < .001.

Discussion

Differential Associations With Loneliness for Instagram and Finsta

As suggested by Ryan et al. (2017), the literature on social media may contain conflicting findings regarding the relationship between social media use and loneliness due to differences in how people use social media. Because Finsta offers users a more authentic alternative to traditional Instagram use through a small follower base of close friends and a disregard for the norms of traditional social media use, in the present study we were interested in exploring whether Finsta use differed from Instagram use in its relationships with loneliness and off-line social engagement.

In line with our hypothesis, Finsta use was positively associated with social loneliness. Studies have shown that perceived social support and tie strength are more closely related to direct social media communication (e.g., comments and direct messages) than to broadcasted, untargeted posting behavior or to passive consumption of posted content (Burke & Kraut, 2014, 2016). Although research has shown that Finsta content is typically more intimate than standard social media content (Dewar et al., 2019; Duffy & Chan, 2019), the norm of broadcasted content rather than direct communication may not be enough to cultivate the feelings of belongingness and connectedness that thwart social loneliness.

As explained by Nowland et al. (2018), the displacement hypothesis suggests that social media use increases loneliness by replacing off-line social interactions with online interactions. Interestingly, although we found that Finsta use was positively associated with social loneliness, we did not find a significant relationship between Finsta use and OSE-friend. This suggests that Finsta users' increased social loneliness may not be due to displacement of one-on-one social interactions. Sheldon (2008) found that people who are unsatisfied with their in-person social interactions logged into their Facebook accounts more frequently. It could be that instead of Finsta making users lonelier, individuals who lack adequate social support and social engagement turn to Finsta as a social crutch (see Kraut et al., 2002).

In line with our hypotheses, Instagram use was negatively associated with social loneliness and positively associated with off-line social support with friends. Additionally, we found that OSE-friend seemed to partially mediate the association between Instagram use and social loneliness. These results support the idea that patterns of Instagram use may align more with the stimulation hypothesis. Content on Instagram is often characterized by its curated and shallow nature (Bryant & Marmo, 2012; Chua & Chang, 2016). As shown in a study by Hall (2018b), users do not typically feel that they have interacted socially after using a traditional social media account, such as Instagram. Because Instagram does not sufficiently address social interaction needs, users must rely on other forms of social interaction, such as face-to-face interaction or phone calls, which have been linked to increased feelings of interconnectedness and reduced loneliness (Liu et al., 2014; Petersen et al., 2016; Twenge et al., 2019). However, due to the correlational design of our study, we cannot definitively assume the directionality of these results. For example, it is possible that those who have more active social lives have more to post about on Instagram because Instagram content tends to be more social in nature than Finsta content. In fact, Kraut et al. (2002) proposed the rich-get-richer hypothesis, or the idea that people who are already highly sociable use social media to reinforce connections with members of their social networks. This could explain both the negative association between Instagram use and social loneliness and the positive association between Instagram use and off-line social engagement.

In contrast with our hypotheses, neither Instagram use nor Finsta use were associated with emotional loneliness. These results are similar to those found by Pollet et al. (2011) that social media users did not differ from those who did not use social media in regard to feelings of emotional closeness to members of their

social networks. Additionally, Pollet et al. found that time spent on social media was not related to emotional closeness with others. Although Finsta and Instagram differ in terms of how intimate the content is, it may be that social media use does not amplify or reduce feelings of emotional loneliness because individuals typically engage in face-to-face interactions with their closest ties.

Limitations

Although this study attempted to remedy the lack of research on Finsta as a social media platform, our findings should be considered with some limitations in mind. First, our sample was largely female, which prevented us from exploring meaningful analyses regarding gender differences. Research had demonstrated that males and females use social media in different ways (Haferkamp et al., 2012; Heffer et al., 2019; Krasnova et al., 2017; Thelwall & Vis, 2017; Twenge & Martin, 2020), and we might expect gender to moderate the associations we found in the present study. Importantly, however, gender was not directly related to any of our outcome variables (see Table 1). Future research with a more representative sample should examine whether the differential associations between Finsta and Instagram use and loneliness hold for both males and females. A second limitation was the correlational design of the study. Because we did not use an experimental design, we cannot indicate causality or directionality between our predictor and outcome variables. Additionally, without longitudinal data, the directionality of our mediation model is inconclusive. As mentioned, it may be the case that those who are sociable use Instagram more, whereas those who are lonely feel more comfortable in the intimate digital environment of Finsta.

Directions for Future Research

To determine the directionality of the relationships between Instagram use, Finsta use, loneliness, and off-line social engagement, future researchers could use an experimental and/or longitudinal design. Some previous studies offered insights into what these designs could look like. Dienlin et al. (2017) tested the stimulation hypothesis through a longitudinal study that tracked people's loneliness and frequency of communication via face-to-face, social media, and instant messaging over the course of 6 months. Other researchers used longitudinal, experimental designs. Deters and Mehl (2013) explored the effect of the increased posting of Facebook status updates on loneliness through a longitudinal control group study in which participants in the experimental condition were asked to post more Facebook statuses than usual. A similar study by Hunt et al. (2018) focused on the effect of reduced social media use on loneliness by using a longitudinal, experimental design in which participants in the experimental condition were asked to limit their Facebook, Instagram, and Snapchat use for 3 weeks. Additionally, future researchers of Finsta may want to use experience sampling (i.e., diary method) to obtain more than daily longitudinal data about Finsta use.

Conclusions

Our findings imply that all social media are not created equal; even within the same platform (Instagram), we found differential associations with social loneliness depending on the type of account. Specifically, we found that the relationships between loneliness, social engagement, and Instagram use provided support for the stimulation hypothesis, whereas the relationships between loneliness, social engagement, and Finsta use partially supported the displacement hypotheses. These results contribute to the understanding of Finsta, a relatively understudied social media platform. The differential associations found in this study have potential clinical implications as well. Social media use has been linked to depression, anxiety, and low self-esteem (Dhir et al., 2018; Woods & Scott, 2016). Clinicians may use the findings from our study to acknowledge that these negative implications of social media use can depend on what platform is being used. Additionally, in light of the current coronavirus pandemic, it is especially relevant to explore patterns of social media use and

loneliness. Due to stay-at-home orders issued across the United States, individuals are getting fewer face-to-face interactions than usual and may be depending more on social media as a form of social interaction. Our findings may help researchers understand whether this increased social media use is helping or hurting users during an already stressful and isolating time.

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