

# Examining the Relationships Between Instagram Use, Perceived Social Support, and Psychological Well-Being<sup>☆</sup>

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## ABSTRACT

This study examined the relationship between SNS use and individual psychological well-being on Instagram. In particular, this study sorted three types of perceived social support—informational, companionship, and self-esteem—to investigate how they influenced individual life satisfaction and loneliness. Results from a survey of 174 college students showed that: (1) frequency of Instagram use was a significant predictor of all three types of perceived social support; (2) status updates had positive effects on perceived self-esteem support, while posting photos was a significant predictor of perceived companionship support; (3) browsing others' profiles was a significant negative predictor of perceived self-esteem support and finally (4) perceived companionship social support had a positive effect on life satisfaction, whereas self-esteem social support had a negative effect on loneliness. These findings imply that Instagram users obtain specific types of social support depending on which activities they engage in and that different types of social support have different effects on well-being.

☞ keyword : Instagram, Social support, Subjective well - being, Loneliness

## 1. Introduction

According to a survey conducted in October 2016, the usage rates of Facebook (81.8%) and Instagram (36.9%) in Korea are relatively high for individuals in their 20s [1]. The increasing popularity of SNSs as tools for young adults has made it possible to use SNS activity to analyze young adults' emotions. An analysis of SNS textposts over the past four years, found that 65% of them reflect negative feelings such as 'worry' and 'anxiety' [2].

Koreans in their 20s and 30s feel helpless because of economic and social pressures such as rising prices, tuition fees, and employment difficulties. Koreans in this age group most frequently use terms such as "despair" and "loneliness" on SNS to describe their emotions [2]. Given this state of affairs, we must consider how the use of SNS among young people affects their psychological well-being.

Prior research has examined psychological outcomes related to SNS, but studies of subjective well-being have produced differing or mixed results. Although researchers have explored key predictors such as amount of SNS use (time spent), frequency of SNS use, number of SNS friends, they have often failed to predict positive outcomes [3].

Moreover, these studies have frequently produced inconsistent findings. For instance, a study examining the relationship between the use of SNS and loneliness argued that loneliness decreased as Facebook was used to maintain relationships, while loneliness increased as more people use the image for their own positive image formation. Another study found no statistically significant relationship between individuals' use of Facebook and life satisfaction [4], while Kim and Lee (2011) found a positive correlation between Facebook friend numbers and well-being [5].

These mixed findings indicate that a conclusive understanding of the impact of SNS on the lives of individuals will require further investigations. This study aimed to broaden scholarly understanding of this important issue by focusing on the association between Instagram use and psychological well-being among college students.

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The current study extended past research on the relationship between SNS use and psychological well-being in following ways. First, unlike previous studies that have dealt separately with the positive or negative sides of well-being, this study investigated the phenomenon from both perspectives—life satisfaction and loneliness. Second, this study examined the distinctive power of social support on SNS as predictor of well-being by sorting it into specific categories. Past research on SNS has suggested that the social support individuals receive from online interactions is an important predictor of well-being [6,7], given that obtaining social support through SNS interaction is one of most common reasons for using SNS. Although different types of social support can be received or exchanged, researchers have paid little attention to distinguishing one type from another. Schaefer et al. (1981) argued that “the importance of distinguishing among different types of support lies in the possibility that they may have independent effects on health and psychological functioning” (p. 386) [8]. Pursuing this argument, the study classified three different types of social support—informational, companionship, and self-esteem—and examined how each related to psychological outcomes, both life satisfaction and loneliness. In these ways, this study contributes to the existing literature on the association between SNS, social support, and well-being outcomes.

## 2. Literature Review

### 2.1 Instagram

Since its debut in October 2010, Instagram, has quickly become a leading social networking site (SNS). Instagram functions like a photo version of Twitter. Unlike Twitter which allows users post 140 characters, Instagram users post “aesthetically-filtered photos or videos” (p. 157) [9]. Hu, Manikonda, & Kambhampati (2014) found that photos with friends and selfies are the most popular on Instagram [10]. It is also reported that among photos with faces 38% more likely to receive a “like” and 32% more likely to receive a comment than those without [11]. Viewing “like”, commenting on others’ photos, and follow other members, Instagram users may express more affection toward others,

compared to the other SNS such as Facebook, and Twitter [12].

According to Statista (2017), Instagram had reached 800 million monthly active users in 2017, up from 600 million in December 2016. It is also reported that 41 % of global users are 24 years of age or younger. Instagram has become also valuable marketing tool. As of March 2016, 98 % of fashion brands had an Instagram profile [13]. Studies on Instagram have investigated the motives for using Instagram [14], selfies phenomenon on Instagram [15], and specific functions of Instagram such as hashtag [16].

### 2.2 Definitions and Types of Social Support

Social support has been defined as the resources or aids exchanged between individuals through interpersonal ties [17]. Schaefer et al (1981) insisted that perceived social support involves an evaluation or appraisal of whether or not a given interaction is helpful [8]. In the various conceptual definitions of social support, the common theme is that social support is a positive resource obtained through interaction with others [18].

Researchers have identified several types of social support, but their classifications vary. For instance, Schaefer et al (1981) suggested three types: emotional (intimacy and being able to rely on other people), informational (giving information or providing feedback about how an individual is doing), and tangible support (providing direct aid such as money or goods) [8]. Eastine and LaRose (2005) proposed four basic types of social support: companionship, informational, self-esteem, and instrumental

social support [19]. They also included self-esteem social support, which involves reinforcing one’s sense of personal value and worth and validates an individual’s life.

Based on these two works, Oh et al (2014) proposed three types of social support that can be applied in SNS contexts: appraisal (informational), companionship, and self-esteem [3]; they excluded tangible support, deeming it irrelevant in online interactions. Based on these previous studies, this study adopted three types of social support: informational (giving/receiving information and advice) companionship (intimacy and attachment), and self-esteem

(one's feeling of confidence and reassurance).

In the advanced communication technology context, social support has become one of the key benefits that SNS users perceive in SNSs [7]. Individuals treat SNS friend numbers as a primary indicator of social support [20]. Many studies have supported this view, showing that users' SNS friend numbers positively correlate with their perceived social support [21,5,3]. Other studies have found that Facebook use in general (e.g. amount of time or frequency) is related to users' perceived social support. Meanwhile, recognizing SNSs as places where people present themselves in online profiles with pictures and posts about life events and where they share and exchange opinions and feedback and upload photos and videos, the possibility that users obtain different types social support through such diverse activities must be acknowledged. Nonetheless, few studies have focused on the relationships among specific SNS behaviors and different types of social support—prior research mainly used general SNS use measurements (e.g., time spent, number of friends).

This study aims to fill this gap. In addition to considering general SNS use, the study included three specific SNS behaviors (updating statuses and profiles, posting photos, and browsing others' profiles and photos), and investigated how such activities related to each type of social support (informational, companionship, and self-esteem) separately. Therefore, the following research questions is proposed:

*RQ1: What specific SNS behaviors affect different dimensions of social support?*

## 2.3 Social Support on SNS and Well-being

Kim and Lee (2011) studied the relationship between the amount of SNS use and emotional well-being, aiming to determine whether SNS use directly influenced happiness [5]. They reported that use of Facebook could improve the life satisfaction of adolescents, because it provides an avenue for social support. Ellison et al. (2007) found that Facebook use affects emotional resources such as satisfaction with life and subjective well-being [21]. Another study found that if people perceive higher social support on SNS, they maintain more positive emotions and their life satisfaction ultimately

increases [22].

Although these studies have meaningful implications, how various types of social support relate to well-being remains unclear, because these studies combined different types of social support into a single variable. One study reported that companionship support had a direct effect on life satisfaction, while appraisal and esteem support had indirect effects on life satisfaction through the sense of community [3]. Since few studies have examined this topic, the findings remain very limited. Therefore, the following research question is proposed:

*RQ2: What specific dimensions of social support on SNS affect life satisfaction?*

Meanwhile, studies have also found evidence that SNS use has negative well-being outcomes. SNS use has been linked to increased depression. For adolescent girls, emotional investment in SNSs has been associated with lower self-esteem and depressed mood. In particular, depressed moods increased more among girls who have SNS profiles than among boys who have SNS profiles [23]. Davila et al. (2012) examined the SNS behaviors of college students and found that more negative and less positive interactions on SNS were associated with greater depressive symptoms [24]. As a result, they insisted that “depressive symptoms were associated with the quality of social networking interactions, not quantity” (p. 72).

In line with this, since social support is considered an important benefit of social interaction, the supposition that increased social support through SNSs may decrease depression is plausible. Therefore, the following research question is proposed:

*RQ3: What specific dimensions of social support affect loneliness?*

## 3. Method

### 3.1 Sample

This study selected college students as the target sample for this study. The respondents were drawn from undergraduate

students enrolled in communication classes at a large university in Seoul. A survey questionnaire was used. The respondents completed a total of 174 surveys. The respondents' ages ranged from 19 to 27 years old, with an average age of 23.3. Among the respondents 52.8% were female (N=89) and 47.2% were male (N=85).

This study chose Instagram as the target SNS for several reasons. First, previous research has generally examined SNS phenomena on Facebook. Second, Instagram has recently achieved considerable popularity as a leading SNS in South Korea. The number of Instagram users in South Korea increased 12.9% between 2016 and 2017, from 6 million in March 2016 to 10 million in March 2017, while the number of Facebook and Twitter users declined during that same period [1].

### 3.2 Measures

*Frequency of Instagram use* was measured with a 6-point ordinal scale ranging from (1) once a week or less to (6) more than 5 times a day. Among respondents 68% (N=118) reported that they used Instagram "more than 5 times a day," 18% (N=32) reported "three times a day," and 11.2% (N=19) said "once a day." Only 2.8% (N=4) reported "once a week."

*Number of SNS friends* was measured with a 6-point ordinal scale ranging from (1) fewer than 100 persons to (6) more than 500 persons. More than half of respondents (51%, N=89) reported that they have fewer than 100 friends, and only 6.6% (N=11) reported that they have more than 500 friends.

*Perceived social support* was measured with nine items reflecting our three chosen dimensions: informational, companionship, and self-esteem support. Selected items were from previous literature [3,19]. Examples include: "there is at least one person I know whose advice I really trust," (informational support), "most people I know do enjoy the same things that I do," (companionship support), and "people I know have a lot of confidence in me," (self-esteem support). The index was reliable: for perceived informational  $\alpha = .89$ , companionship ( $\alpha = .86$ ), and self-esteem ( $\alpha = .90$ ).

*Life satisfaction* was measured with four items including

"I am satisfied with my life" and "in most ways my life is close to my ideal." These items were selected from the Satisfaction with Life Scale [25], and used a five-point Likert scale ranging from 1=strongly disagree to 5=strongly agree for each of them. The index was reliable ( $\alpha = .89$ ).

*Loneliness* was measured with five items selected from the UCLA Loneliness Scale [3,22]. Examples include: "I feel that my interests and ideas are not shared by those around me" and "I feel that no one really knows me well." A five-point Likert scale ranging from 1=strongly disagree to 5=strongly agree was used. The index was reliable ( $\alpha = .91$ ).

## 4. Result

A series of hierarchical regression analysis was conducted to determine SNS behaviors to predict different types of social support. Independent variables were Instagram friends, frequency of Instagram use, and three types of Instagram behaviors. Dependent variables were three types of social support. Age and gender were entered as controlling variables into the first block of the each hierarchical regression analysis.

Companionship social support was positively and significantly predicted by frequency of Instagram use ( $\beta=.16$ ,  $p<.01$ ) and posting photos ( $\beta=.17$ ,  $p<.01$ ) after controlling for demographic variables. When the 5 independent variables were added, the R square change was 8% after controlling for demographics.

Self-esteem social support was positively and significantly predicted by frequency of Instagram use ( $\beta=.18$ ,  $p<.01$ ) and updating status profiles ( $\beta=.21$ ,  $p<.01$ ), while browsing others' profiles emerged as a significant negative predictor ( $\beta= -.18$ ,  $p<.01$ ), after controlling demographic variables. When the 5 independent variables were added, the R square change was 6% after controlling for demographics.

In predicting informational support, only frequency of Instagram use emerged as a significant positive predictor ( $\beta=.12$ ,  $p<.01$ ), after controlling for demographic variables. When the 5 independent variables were added, the R square change was 4% after controlling for demographic variables.

To examine the second research question which focuses on the effects of social support on life satisfaction the study performed a stepwise regression to identify the best predictor among the main variables. Initially, only gender and age were entered to test the predictive ability of each demographic variable but no significant predictors emerged. Therefore, for the final analysis demographic variables were not included. The results indicated that perceived companionship support ( $\beta=.19, p<.01$ ) was a positive predictor of life satisfaction. However self-esteem and informational support did not impact life satisfaction.

To examine the third question which focused on the relationship between the various types of social support and loneliness, another stepwise regression was performed with the same process applied to test research question 2. When age and gender were entered initially, no significant predictors emerged. Therefore, for the final analysis demographic variables were not included. The results showed that perceived self-esteem support was a negative predictor of loneliness ( $\beta=-.292, p<.01$ ). The study found no effects of other types of social supports (informational and companionship) on loneliness.

## 5. Conclusion

Although SNSs help people expand and manage their social contacts easily, the sites may not be useful if people do not receive the support they need through online interactions. To better understand the importance of social support in SNSs, this study classified different types of social support and investigated their predictive influences on individual well-being.

This study found that frequency of Instagram use positively predicted all dimensions of social support—companionship, informational, and self-esteem. The more that users accessed Instagram, the more they experienced feelings of intimacy, emotional attachment to others, and self-confidence. This finding supports previous research revealing a positive relationship between Facebook use and social support. Collectively, notwithstanding different types of SNSs and different measurements of social support, these findings support the conclusion that SNSs are beneficial

places where users receive support from others.

Meanwhile, previous studies have identified friend numbers on SNSs as an important social support resource [20] and an indicator of supportive interaction [3]; however, our findings did not support this view; it was found that Instagram friend numbers did not influence any dimension of social support. The different functions of different SNSs could explain this discrepancy. That is, since college students mainly use Facebook to manage social ties [7], having more friends on Facebook it will benefit them by enabling them to receive numerous reactions when they post photos or comment on others' posts and this may lead to perceived social support. In contrast to Facebook's relational use-focus, Instagram is based more on one's personal identity, functioning more as a photo and video sharing site that prioritizes self-disclosure.

Our analysis also found that Instagram behaviors affected different types of social support. The results indicated that the user behavior of updating statuses had a positive effect on the different types of social support, while the behavior of browsing others' profiles had a negative effect on self-esteem support. In addition, the behavior of posting photos positively influenced perceived companionship support. Taken together, these findings imply that user perceptions of social support depend on what activities they engage in on Instagram.

Prior studies on social support and life satisfaction have found a positive relationship between them [26]. However, these studies used general measurements of social support while our study classified social support into three distinct types. This study found that only perceived companionship support was a significant predictor of life satisfaction. In other words, if Instagram users perceived greater companionship support, their life satisfaction increased.

A more important finding of this study is that self-esteem support had a negative effect on loneliness. That is, users who perceived greater self-esteem support felt less lonely. Together our two findings noting the effects of social support on life satisfaction and loneliness suggest that different types of social support have different effects on well-being. Therefore, SNS researchers should distinguish between general social support measures and specific measures in order to capture the types of support users

actually obtain through SNSs. Moreover, given that previous studies have mainly focused on the positive effects of social support on life satisfaction, to generate a more comprehensive understanding of the specific roles of social support in SNS interactions, future studies should investigate the negative effects of different types of social support on individuals' well-being (e.g., loneliness or depression).

This study offers important practical implications for SNS marketers to attract their users. First, as this study's results suggests, Instagram use itself is related to social support and perceived social support impacts on user's life satisfaction and loneliness, SNS marketers should consider the value of social support in designing SNS applications. Creating social support icons or features would be beneficial. Second, given that Instagram becomes one of the most popular SNS these days, other SNS programmers should develop a unique service to improve image/photo posting and sharing.

Several of this study's limitations should be noted. First, the respondents were all college students and the study acknowledged that the self-selection of the students who took the surveys limits the generalizability of our findings. Another drawback concerns measurement issues. Instagram behaviors are complex and dynamic. This study only scratched the surface by measuring some behaviors (e.g., updating status and posting photos). Considering the variety of activities on Instagram (selfies, hashtags, etc.), more research needs to be done to test the relationships between social support and the specific and dynamic behaviors of Instagram users.

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